This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

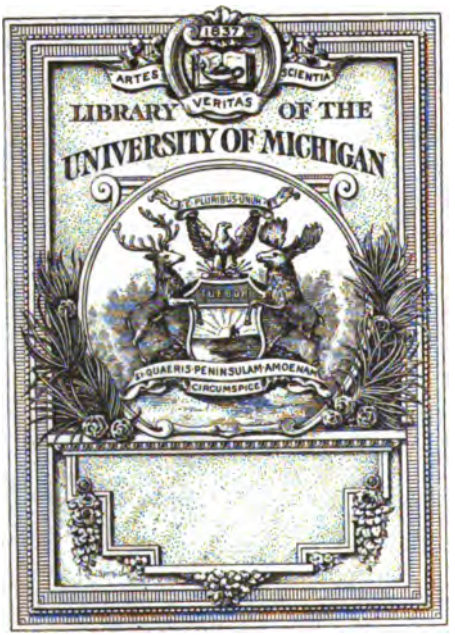
+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`

B 438438


1837
ARTES
VERITAS
SCIENTIA
LIBRARY OF THE
UNIVERSITY OF MICHIGAN
E PLURIBUS UNUM
SI QUAERIS PENINSULAM AMOENAM
CIRCUMSPICE

HC
1
.R4

CONSULAR REPORTS.

COMMERCE, MANUFACTURES, ETC.

VOL. LVIII.

NOS. 216, 217, 218, AND 219.

SEPTEMBER, OCTOBER, NOVEMBER, AND DECEMBER, 1898.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1898.

CONTENTS.

		Page.
I.—Commerce with the Philippines		1
II.—Imports of Shoes into the Philippines	*Gilbert*	10
III.—The Caroline Islands	*Doty*	12
IV.—Federal Movement in Australasia	*Bell*	19
V.—Hindrances to American Oil Trade in China	*Bedloe*	23
VI.—Railway Supplies for China	*Goodnow*	25
VII.—The Port of Woosung	*Goodnow*	26
VIII.—New Trade Regulations on the Yangtze	*Denby*	28
IX.—Cotton and Cotton Goods in Japan	*Lyon*	30
X.—Opening of Ports in Korea	*Allen*	31
XI.—Cotton Piece-Goods Trade at Calcutta	*Patterson*	32
XII.—The European Sugar Question	*Morris*	33
XIII.—The English Chemical Trade	*Boyle*	35
XIV.—Siphon Bottles in France	*Gowdy*	39
XV.—Siphon Bottles in England	*Osborne*	40
XVI.—Cotton Trade of the World	*Morris*	41
	Monaghan	42
XVII.—Cotton Industry of France	*Morris*	43
XVIII.—The Diesel Caloric Motor at the Munich Exposition	*Mason*	44
XIX.—A New Incandescent Filament for Electric Lights	*Mason*	45
XX.—The Present and Prospective Supply of Calcium Carbide	*Mason*	47
XXI.—Papyristite	*Lieberknecht*	49
XXII.—Value of the German Workingmen's Insurance System	*Monaghan*	51
XXIII.—Germany's Straw Industry	*Monaghan*	53
XXIV.—German Opposition to United States Pork	*Warner*	54
XXV.—American and German Machinery	*Stern*	55
XXVI.—The German Farmer	*Kehl*	57
XXVII.—Beet-Sugar Exports from Germany	*Goldschmidt*	57
XXVIII.—Reclaiming Sterile Land in Germany	*Hoffman*	38
XXIX.—Commerce of Belgium, 1897	*Gilbert*	59
XXX.—Congress on Tariffs and Labor in Antwerp	*Lincoln*	60
XXXI.—Anglo-American Chamber of Commerce in Belgium	*Roosevelt*	61

		Page.
XXXII.—Exportation of Firearms from Belgium	*Morris*	63
XXXIII.—Straw and Flax Goods in Belgium	*Gilbert*	64
XXXIV.—The Round Cotton Bale at Ghent	*Morris*	64
XXXV.—The Foreign Trade of Austria-Hungary	*Hossfeld*	65
XXXVI.—Potato Flour in Austria	*Mahin*	68
XXXVII.—Duties on Sodium Acetate and Calcium Acetate in the Netherlands	*Newel*	69
XXXVIII.—Increase of Population in Russia	*Morris*	70
XXXIX.—The Russian Famine	*Holloway*	72
XL.—Proposition to Prohibit Export of Grain from Russia	*Smith*	73
XLI.—Reduction of Duty on Agricultural Machinery in Russia	*Holloway*	74
XLII.—Cast-Iron Industry of Russia in 1897	*Holloway*	76
XLIII.—Imports into South Africa	*Stowe*	77
XLIV.—Commerce of Cape Colony	*Stowe*	84
XLV.—Commerce of Natal	*Stowe*	88
XLVI.—Imports of Natal	*Stowe*	89
XLVII.—Natal Railways	*Stowe*	89
XLVIII.—Proposed Tariff Changes in Cape Colony	*Stowe*	89
XLIX.—American Vines in South Africa	*Stowe*	90
L.—Trade Openings in South Africa	*Stowe*	93
LI.—Groceries and Provisions in South Africa	*Stowe*	100
LII.—Trade Conditions in Malta	*Grout*	108
LIII.—Bicycle Trade at Malta	*Grout*	113
LIV.—Railway Subsidies in British Columbia	*Smith*	114
LV.—Canadian Imports from the United States	*Brush*	117
LVI.—Increase in Canada's Trade	*Ledoux*	118
LVII.—Warning to Alaska Prospectors	*Dudley*	119
LVIII.—Increase of German Consular Service in Brazil	*White*	120
LIX.—Construction of Projected Railway in Haiti	*Livingston*	121
LX.—German Commerce in Hankau	*Monaghan*	122
LXI.—Match Industry in Java	*Everett*	123
LXII.—The Port of Hiogo	*Lyon*	125
LXIII.—Trade of Calcutta with the United States, 1897–98, *Patterson*		125
LXIV.—Canal and Railway Contract in Madagascar	*Gibbs*	128
LXV.—The French Bureau of Foreign Commerce	*Covert*	130
LXVI.—The Consular Service as an Aid to Foreign Trade, *Monaghan*		134
LXVII.—Glass Industry in Germany	*Brodowski*	135
LXVIII.—Shipping of Germany	*Monaghan*	137
LXIX.—German Trade with South America	*Monaghan*	138
LXX.—Economic Conditions in Guadeloupe	*Aymé*	139

Page.

LXXI.—ITALIAN IMMIGRANTS IN VENEZUELA.....*Loomis* 140

LXXII.—NOTES (American Dried Apples in France—German Imports and Exports—Germany's Machinery Exports—The World's Export Trade—Employment of Women in Europe—Passports Required of Heidelberg Students—Congress of Orientalists in Italy—Irish Mackerel Fishing—Hops in Russia—Hops in Bavaria—Beet Crop of Russia in 1897—Russian Merchant Marine—Firearms in Liege—Agricultural Credit Loan Act in Canada—Freight Rates on Canadian Pacific—Bicycles in Colombia—Matches in Paraguay—Mandioca in Paraguay—Agriculture in Paraguay—Kerosene in Paraguay—Exports from Orange Free State—Telephones in Cape Colony—Petroleum Regulation in Cape Colony—South African Law Regarding Commission Agents—Notes from China—Duty on Grain Suspended in Korea—Perfumery Imports into Japan—Wheat and Flour in Japan—Demand for Locomotives and Rolling Stock in Japan—Demand for American Steel Plates in Europe—Flax Spinning in Cork—Exhibition of Machinery in Munich—Consular Reports Transmitted to Other Departments) 143

LXXIII.—FOREIGN REPORTS AND PUBLICATIONS (British vs. Russian Trade in Persia—Economic Conditions in Siberia—Railways in China—German Interests in Guatemala)..... 158

REPORTS BY COUNTRIES.

	Page.
ALASKA:	
Warning to prospectors in	119
AUSTRALASIA:	
Federal movement in	19
AUSTRIA-HUNGARY:	
Potato flour in	68
The foreign trade of	65
BAVARIA:	
Hops in	148
BELGIUM:	
Anglo-American chamber of commerce in	61
Commerce of, 1897	59
Congress on tariffs and labor in Antwerp	60
Exportation of firearms from	63
Firearms in	149
Straw and flax goods in	64
The round cotton bale at Ghent	64
BRAZIL:	
Increase of German consular service in	120
BRITISH COLUMBIA:	
Railway subsidies in	114
CANADA:	
Agricultural credit loan act in	150
Freight rates on Canadian Pacific	150
Imports from the United States	117
Increase in trade of	118
CAPE COLONY:	
Commerce of	84
Petroleum regulations	154
Proposed tariff changes in	89
Telephones in	154
CAROLINE ISLANDS	12
CHINA:	
German commerce in Hankau	122
Hindrances to American oil trade in	23
New trade regulations on the Yangtze	28
Notes from	155
Railway supples for	25
The port of Woosung	26
COLOMBIA:	
Bicycles in	151
ENGLAND:	
Chemical trade of	35
Siphon bottles in	40

EUROPE: Page.
Demand for American steel plates in 156
Employment of women in 145
Sugar question in 33
FRANCE:
American dried apples in 143
Bureau of foreign commerce of 130
Cotton industry of 43
Siphon bottles in 39
GERMANY:
American and German machinery 55
A new incandescent filament for electric lights 45
Beet-sugar exports from 57
Exhibition of machinery in Munich 157
Glass industry in 135
Imports and exports of 143
Machinery exports of 144
Opposition to United States pork 54
Passports required of Heidelberg students 146
Reclaiming sterile land in 58
Shipping of 137
Straw industry of 53
The consular service as an aid to foreign trade 134
The Diesel caloric motor at the Munich exposition 44
The German farmer 57
The present and prospective supply of calcium carbide 47
Value of the German workingmen's insurance system in 51
GUADELOUPE:
Economic conditions in 139
HAITI:
Construction of projected railway in 121
INDIA:
Cotton piece-goods trade at Calcutta 32
Trade of Calcutta with the United States, 1897–98 125
IRELAND:
Flax spinning in Cork 157
Mackerel fishing of 147
ITALY:
Congress of orientalists in 146
JAPAN:
Cotton and cotton goods in 30
Demand for locomotives and rolling stock in 156
Perfumery imports into 155
The port of Hiogo 125
Wheat and flour in 156
JAVA:
Match industry in 123
KOREA:
Duty on grain suspended in 155
Opening of ports in 31
MADAGASCAR:
Canal and railway contract in 128

	Page.
MALTA:	
Bicycle trade at	113
Trade conditions in	108
NATAL:	
Commerce of	88
Imports of	89
Railways of	89
NETHERLANDS:	
Duties on sodium acetate and calcium acetate in	69
ORANGE FREE STATE:	
Exports from	153
PARAGUAY:	
Agriculture in	152
Kerosene in	153
Mandioca in	152
Matches in	151
PHILIPPINES:	
Commerce with the	1
Imports of shoes into	10
RUSSIA:	
Beet crop of, in 1897	148
Cast-iron industry of, in 1897	76
Famine in	72
Hops in	147
Increase in population of	70
Merchant marine of	149
Proposition to prohibit export of grain from	73
Reduction of duty on agricultural machinery in	74
SOUTH AFRICA:	
American vines in	90
Groceries and provisions in	100
Imports into	77
Law regarding commission agents in	154
Trade openings in	93
SOUTH AMERICA:	
German trade with	138
SWITZERLAND:	
Papyristite in	49
VENEZUELA:	
Italian immigrants in	140
WORLD:	
Cotton trade of	41, 42
Export trade of	145

Full directions for binding the Consular Reports are given in No. 131, page 663.

VALUES OF FOREIGN COINS AND CURRENCIES.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

These estimates "are to be taken (by customs officers) in computing the value of all foreign merchandise made out in any of said currencies, imported into the United States."

The following statements, running from January 1, 1874, to April 1, 1898, have been prepared to assist in computing the values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account that the ruble of Russia, for instance, has fluctuated from 77.17 cents in 1874 to 37.4 cents in April, 1897, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, and 1882 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz, (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—*Countries with fixed currencies.*

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange."

Countries.	Standard.	Monetary unit.	Value in U.S. gold.	Coins.
Argentine Republic*.	Gold and silver..	Peso.....	$0.96,5	Gold—Argentine ($4.82,4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†.....	Gold	Crown.....	.20,3	Gold—20 crowns ($4.05,2) and 10 crowns.
Belgium	Gold and silver..	Franc.....	.19,3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil.....	Gold	Milreis.....	.54,6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland).	.....do	Dollar.....	1.00	
Chile.....	.....do	Peso.....	.36,5	Gold—escudo ($1.25), doubloon ($3.65), and condor ($7.30); silver—peso and divisions.
Costa Rica.....	.....do	Colon.....	.46,5	Gold—2, 5, 10, and 20 colons; silver—5, 10, 25, and 50 centisimos.
Cuba	Gold and silver..	.....do	.92,6	Gold—doubloon ($5.01,7); silver—peso.
Denmark	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Egypt.....	.....do	Pound (100 piasters).	4.94,3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland.....	.....do	Mark.....	.19,3	Gold—10 and 20 marks ($1.93 and $3.85,9).
France	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany	Gold	Mark.....	.23,8	Gold—5, 10, and 20 marks.
Great Britain.....	.....do	Pound sterling...	4.86,6½	Gold—sovereign (pound sterling) and half sovereign.
Greece.....	Gold and silver..	Drachma.....	.19,3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti	.....do	Gourde.....	.96,5	Silver—gourde.
Italy.....	.....do	Lira	.19,3	Gold—5, 10, 20, 50, and 100 lire silver—5 lire.
Japan‡.....	Gold	Yen.....	.49,8	Gold—1, 2, 5, 10, and 20 yen.
Liberia	.....do	Dollar.....	1.00	
Netherlands§.....	Gold and silver..	Florin	.40,2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland	Gold	Dollar.....	1.01,4	Gold—$2 ($2.02,7).
Portugal.....	.....do	Milreis.....	1.08	Gold—1, 2, 5, and 10 milreis.
Russia ‖.....	.....do	Ruble.....	.77,2	Gold—imperial ($7.718) and ½ imperial ($3.80); silver—¼, ½, and 1 ruble.
Spain.....	Gold and silver..	Peseta.....	.19,3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway.	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Switzerland	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey	Gold	Piaster.....	.04,4	Gold—25, 50, 100, 200, and 500 piasters.
Venezuela.....	Gold and silver..	Bolivar.....	.19,3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

* In 1874 and 1875, the gold standard prevailed in the Argentine Republic.

† On reference to the table of "fluctuating currencies," it will be seen that Austria had the silver standard up to and including the quarter ended July 1, 1892. The next quarter (October 1) inaugurated the gold standard (see note under table of "fluctuating currencies").

‡ For particulars as to the change from silver to the gold standard, see CONSULAR REPORTS No. 201, p. 259.

§ The Netherlands florin, as will be seen in the "fluctuating" table, became fixed in value (40.2 cents) in 1880.

‖ Russia: Gold the nominal standard; silver the actual standard.—*Note by the United States Treasury.* See, also, review of Russian industries and commerce by the Russian Minister of Finance in "Review of the world's commerce," Commercial Relations of the United States for 1895-96, p. 230.

B.—*Countries with fluctuating currencies, 1874–1890.*

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver	Florin	$0.47,6	$0.45,3	$0.45,3	$0.41,3	$0.40,1	$0.39,8
Bolivia	do	Dollar until 1890; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America	do	Peso	.96,5	.91,8	.91,8	.83,6	.....	.....
China	Silver	Haikwan tael	1.61	1.61	.....	.....	.....	.....
Colombia	do	Peso	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador	do	do	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†	Gold	Pound (100 piasters).	.....	.....	4.97,4	4.97,4	4.90	4.90
India	Silver	Rupee	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan	Gold	Yen	.99,7	.99,7	.99,7	.99,7	.....	.....
	Silver		.....	.....	.....	.....	.87,6	.86,9
Mexico	do	Dollar	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands‡	Gold and Silver.	Florin	.40,5	.38,5	.38,5	.40,2	.....	.....
Peru	Silver	Sol	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia	do	Ruble	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli	do	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on Janury 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver	Florin	$0.39,3	$0.37,1	$0.35,9	$0.34,5	$0.33,6	$0.42
Bolivia	do	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America	do	Peso	.....	.....	.....	.69,9	.68	.85
Colombia	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†	Gold	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.94,3
India	Silver	Rupee	.37,8	.35,7	.34,6	.32,2	.32,3	.40,4
Japan	Gold	Yen	.....	.....	.99,7	.99,7	.99,7	.99,7
	Silver		.85,8	.81	.78,4	.75,3	.73,4	.91,7
Mexico	do	Dollar	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru	Silver	Sol	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia	do	Ruble	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli	do	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

*The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (see CONSULAR REPORTS, No. 147, p. 623) established the gold standard.

†The Egyptian pound became fixed in value at $4.94,3 in 1887.

‡The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—*Quarterly valuations of fluctuating currencies.*

Countries.	Monetary unit.	1895.				1896.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.45,5	$0.44,1	$0.48,6	$0.48,6	$0.49,1	$0.49,3	$0.49,7	$0.49
Central America.	Silver peso	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
China	Amoy tael								.79,3
	Canton tael								.79
	Chefoo tael	.70,4	.68,3	.75,1	.75,2	.75,9	.76,3	.76,9	.75,8
	Chinkiang tael								.77,4
	Fuchau tael								.73,3
	Haikwan tael	.74,9	.75,6	.80	.80	.80,8	.81,2	.81,9	.80,6
	Hankow tael								.74,2
	Ningpo tael								.76,2
	Niuchwang tael.								.74,3
	Shanghai tael	.67,3	.65,2	.71,8	.71,8	.72,5	.72,9	.73,5	.72,4
	Swatow tael								.73,2
	Takao tael								.79,8
	Tientsin tael	.71,4	.69,2	.76,1	.76,2	.76,9	.77,3	.78	.76,8
Colombia	Silver peso	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
Ecuador	do	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
India	Silver rupee	.21,6	.21	.23,1	.23,1	.23,3	.23,4	.23,6	.23,3
Japan	Silver yen	.49,1	.47,6	.52,4	.52,4	.52,9	.53,2	.53,2	.52,8
Mexico	Silver dollar	.49,5	.47,9	.52,8	.52,8	.53,3	.53,6	.54	.53,2
Persia	Silver kran			.08,9	.09	.09	.09,1	.09,2	.09
Peru	Silver sol	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
Russia	Silver ruble	.36,4	.35,3	.38,9	.38,9	.39,3	.39,5	.39,8	.39,2
Tripoli	Silver mahbub	.41,1	.39,8	.43,8	.43,8	.44,3	.44,5	.44,9	.44,2

Countries.	Monetary unit.	1897.				1898.	
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.
Bolivia	Silver boliviano.	$0.47,4	$0.46,8	$0.44,3	$0.41,2	$0.42,4	$0.40,9
Central America	Silver peso	.47,4	.46,5	.44,3	.41,2	.41,4	.40,9
China	Amoy tael	.76,7	.75,7	.71,7	.66,4	.68,5	.66,2
	Canton tael	.76,5	.75,5	.71,5	.66,4	.68,3	.66
	Chefoo tael	.73,3	.72,4	.68,6	.63,7	.65,5	.63,3
	Chinkiang tael	.74,9	.73,9	.70	.65,1	.66,9	.64,6
	Fuchau tael	.70,9	.70	.66,3	.61,6	.63,4	.61,2
	Haikwan tael	.78	.77	.73,1	.67,8	.69,7	.67,3
	Hankow tael	.71,7	.70,8	.67,1	.62,3	.64,1	.61,9
	Ningpo tael	.73,7	.72,8	.68,9	.64	.64,3	.63,6
	Niuchwang tael.	.71,9	.71	.67,2	.62,5	.65,9	.62
	Shanghai tael	.70	.69,1	.65,5	.60,8	.62,6	.60,4
	Swatow tael	.70,8	.69,9	.66,2	.61,5	.63,3	.61,1
	Takao tael	.77,2	.76,2	.72,2	.67	.66	.66,6
	Tientsin tael	.74,3	.73,4	.69,5	.64,6	.66,4	.64,1
Colombia	Silver peso	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9
Ecuador	do	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9
India *	Silver rupee	.22,5	.22,2	.21,1	.19,6	.20,1	.19,1
Japan	Silver yen	.51,1	.50,5				
Mexico	Silver dollar	.51,5	.50,8	.48,2	.44,6	.46	.44,4
Persia	Silver kran	.08,7	.08,6	.08,2	.07,6	.07,8	.40,9
Peru	Silver sol	.47,4	.46,8	.44,3	.41,2	.42,4	
Russia	Silver ruble	.37,9	.37,4				
Tripoli	Silver mahbub						

*The value of the rupee to be determined by consular certificate.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalents.
Almude	Portugal	4.422 gallons.
Ardeb	Egypt	7.6907 bushels.
Are	Metric	0.02471 acre.
Arobe	Paraguay	25 pounds.
Arratel or libra	Portugal	1.011 pounds.
Arroba (dry)	Argentine Republic	25.3175 pounds.
Do	Brazil	32.38 pounds.
Do	Cuba	25.3664 pounds.
Do	Portugal	32.38 pounds.
Do	Spain	25.36 pounds.
Do	Venezuela	25.4024 pounds.
Arroba (liquid)	Cuba, Spain, and Venezuela	4.263 gallons.
Arshine	Russia	28 inches.
Arshine (square)	do	5.44 square feet.
Artel	Morocco	1.12 pounds.
Baril	Argentine Republic and Mexico	20.0787 gallons.
Barrel	Malta (customs)	11.4 gallons.
Do	Spain (raisins)	100 pounds.
Berkovets	Russia	361.12 pounds.
Bongkal	India	832 grains.
Bouw	Sumatra	7,096.5 square meters.
Bu	Japan	0.1 inch.
Butt (wine)	Spain	140 gallons.
Caffiso	Malta	5.4 gallons.
Candy	India (Bombay)	529 pounds.
Do	India (Madras)	500 pounds.
Cantar	Morocco	113 pounds.
Do	Syria (Damascus)	575 pounds.
Do	Turkey	124.7036 pounds.
Cantaro (cantar)	Malta	175 pounds.
Carga	Mexico and Salvador	300 pounds.
Catty	China	1.333⅓ (1⅓) pounds.
Do	Japan	1.31 pounds.
Do	Java, Siam, and Malacca	1.35 pounds.
Do	Sumatra	2.12 pounds.
Centaro	Central America	4.2631 gallons.
Centner	Bremen and Brunswick	117.5 pounds.
Do	Darmstadt	110.24 pounds.
Do	Denmark and Norway	110.11 pounds.
Do	Nuremberg	112.43 pounds.
Do	Prussia	113.44 pounds.
Do	Sweden	93.7 pounds.
Do	Vienna	123.5 pounds.
Do	Zollverein	110.24 pounds.
Do	Double or metric	220.46 pounds.
Chih	China	14 inches.
Coyan	Sarawak	3,098 pounds.
Do	Siam (Koyan)	2,667 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Cuadra	Argentine Republic	4.2 acres.
Do	Paraguay	78.9 yards.
Do	Paraguay (square)	8.077 square feet.
Do	Uruguay	Nearly 2 acres.
Cubic meter	Metric	35.3 cubic feet.
Cwt. (hundredweight)	British	112 pounds.
Dessiatine	Russia	2.6997 acres.
Do	Spain	1.599 bushels.
Drachme	Greece	Half ounce.
Dun	Japan	1 inch.
Egyptian weights and measures	(*See* CONSULAR REPORTS No. 144.)	
Fanega (dry)	Central America	1.5745 bushels.
Do	Chile	2.575 bushels.
Do	Cuba	1.599 bushels.
Do	Mexico	1.54728 bushels.
Do	Morocco	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do	Uruguay (double)	7 776 bushels.
Do	Uruguay (single)	3.888 bushels.
Do	Venezuela	1.599 bushels.
Fanega (liquid)	Spain	16 gallons.
Feddan	Egypt	1.03 acres.
Frail (raisins)	Spain	50 pounds.
Frasco	Argentine Republic	2.5096 quarts.
Do	Mexico	2.5 quarts.
Fuder	Luxemburg	264.17 gallons.
Garnice	Russian Poland	0.88 gallon.
Gram	Metric	15.432 grains.
Hectare	do	2.471 acres.
Hectoliter:		
Dry	do	2.838 bushels.
Liquid	do	26.417 gallons.
Joch	Austria-Hungary	1.422 acres.
Ken	Japan	4 yards
Kilogram (kilo)	Metric	2.2046 pounds.
Kilometer	do	0.621376 mile.
Klafter	Russia	216 cubic feet.
Kota	Japan	5.13 bushels.
Korree	Russia	3.5 bushels.
Last	Belgium and Holland	85.134 bushels.
Do	England (dry malt)	82.52 bushels.
Do	Germany	2 metric tons (4,480 pounds).
Do	Prussia	112.29 bushels.
Do	Russian Poland	113/8 bushels.
Do	Spain (salt)	4,760 pounds.
League (land)	Paraguay	4,633 acres.
Li	China	2,115 feet.
Libra (pound)	Castilian	7,100 grains (troy).
Do	Argentine Republic	1.0127 pounds.
Do	Central America	1.043 pounds.
Do	Chile	1.014 pounds.
Do	Cuba	1.0161 pounds.
Do	Mexico	1.01465 pounds.
Do	Peru	1.0143 pounds.
Do	Portugal	1.011 pounds.
Do	Uruguay	1.0143 pounds.
Do	Venezuela	1.0161 pounds.
Liter	Metric	1.0567 quarts.
Livre (pound)	Greece	1.1 pounds.
Do	Guiana	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Load	England (timber)	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 superficial feet.
Manzana	Costa Rica	1⅞ acres.
Do	Nicaragua and Salvador	1.727 acres.
Marc	Bolivia	0.507 pound.
Maund	India	82⅔ pounds.
Meter	Metric	39.37 inches.
Mil	Denmark	4.68 miles.
Do	Denmark (geographical)	4.61 miles.
Milla	Nicaragua and Honduras	1.1493 miles.
Morgen	Prussia	0.63 acre.
Oke	Egypt	2.7225 pounds.
Do	Greece	2.84 pounds.
Do	Hungary	3.0817 pounds.
Do	Turkey	2.85418 pounds.
Do	Hungary and Wallachia	2.5 pints.
Pic	Egypt	21¼ inches.
Picul	Borneo and Celebes	135.64 pounds.
Do	China, Japan, and Sumatra	133⅓ pounds.
Do	Java	135.1 pounds.
Do	Philippine Islands (hemp)	139.45 pounds.
Do	Philippine Islands (sugar)	140 pounds.
Pie	Argentine Republic	0.9478 foot.
Do	Castile	0.91407 foot.
Pik	Turkey	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound)	Denmark and Sweden	1.102 pounds.
Quarter	Great Britain	8.252 bushels.
Do	London (coal)	36 bushels.
Quintal	Argentine Republic	101.42 pounds.
Do	Brazil	130.06 pounds.
Do	Castile, Chile, Mexico, and Peru	101.61 pounds.
Do	Greece	123.2 pounds.
Do	Newfoundland (fish)	112 pounds.
Do	Paraguay	100 pounds.
Do	Syria	125 pounds.
Do	Metric	220.46 pounds.
Rottle	Palestine	6 pounds.
Do	Syria	5¾ pounds.
Sagen	Russia	7 feet.
Salm	Malta	490 pounds.
Se	Japan	3.6 feet.
Seer	India	1 pound 13 ounces.
Shaku	Japan	10 inches.
Sho	do	1.6 quarts.
Standard (St. Petersburg)	Lumber measure	165 cubic feet.
Stone	British	14 pounds.
Suerte	Uruguay	2,700 cuadras (see cuadra).
Tael	Cochin China	590.75 grains (troy).
Tan	Japan	0.25 acre.
To	do	2 pecks.
Ton	Space measure	40 cubic feet.
Tonde (cereals)	Denmark	3.94783 bushels.
Tondeland	do	1.36 acres.
Tsubo	Japan	6 feet square.
Tsun	China	1.41 inches.
Tunna	Sweden	4.5 bushels.
Tunnland	do	1.22 acres.
Vara	Argentine Republic	34.1208 inches.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Vara	Castile	0.914117 yard.
Do	Central America	32.87 inches.
Do	Chile and Peru	33.367 inches.
Do	Cuba	33.384 inches.
Do	Curaçao	33.375 inches.
Do	Mexico	33 inches.
Do	Paraguay	34 inches.
Do	Venezuela	33.384 inches.
Vedro	Russia	2.707 gallons.
Vergees	Isle of Jersey	71.1 square rods.
Verst	Russia	0.663 mile.
Vlocka	Russian Poland	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram ($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6418 gallons.
Hectoliter (100 liters) equals 26.418 gallons.
Kiloliter (1,000 liters) equals 264.18 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.

Decameter (10 meters) equals 393.7 inches.
Hectometer (100 meters) equals 328 feet 1 inch.
Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).
Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.
Are (100 square meters) equals 119.6 square yards.
Hectare (10,000 square meters) equals 2.471 acres.

CONSULAR REPORTS.

COMMERCE, MANUFACTURES, ETC.

Vol. LVIII. SEPTEMBER, 1898. No. 216.

COMMERCE WITH THE PHILIPPINES.

The following statistics in regard to the imports and exports of the Philippine Islands have been compiled from official publications of the various countries mentioned in the possession of the Bureau of Foreign Commerce. In the first table, in which an effort has been made to show the trade by countries of origin and destination, the figures for 1897 are given, except in the case of France, Germany, Belgium, India, the Straits Settlements, and Victoria. For these countries the latest figures available relate to 1896; for the trade of Spain, no later ones than those for 1895 can be obtained.

Countries.	Imports from Philippines.	Exports to Philippines.
Great Britain	$6,223,426	$2,063,598
France	1,990,297	359,796
Germany	223,720	774,928
Belgium	272,240	45,660
Spain	4,819,344	4,973,589
Japan	1,332,300	92,823
China	56,137	97,717
India	7,755	80,156
Straits Settlements	274,130	236,001
New South Wales	119,550	176,858
Victoria	180	178,370
United States	4,383,740	94,597
Total	19,702,819	9,174,098

The average value of the trade of the Philippines is greater than indicated in the above table, having suffered in the past few years on account of political conditions. As will be seen in the statements of the commerce by countries, further on, Great Britain imported from the Philippines, in 1893, to the value of $10,607,000, and exported

nearly $1,500,000 more than the shipments in 1897. France imports three times as much as she did in 1893, but her exports have diminished in an even larger proportion, from over $2,000,000 to $350,000. China imports more than twice as much, but exports considerably less than in 1893. India imports less, but her exports have risen from $57,000 to $80,000. The Straits Settlements have lost over $100,000 in imports and some $140,000 in exports. The trade with New South Wales has grown, but that with Victoria has greatly diminished; and United States commerce, which was $9,314,235 in 1893, has fallen to $4,478,337 in 1897.

The following statements show the principal articles of import and export:

Principal imports from Philippines.

Countries.	Hemp.	Tobacco.	Cocoanuts and copra.	Sugar.
Great Britain	$3,694,214	$716,767	$222,404	$1,512,703
France	76,754	86,451	1,787,198	.....
Germany	166,600	31,654	.....	.....
Japan	100,993	64,477	.....	1,156,411
India	4,965	3,053	.....	.....
Spain	.....	2,533,150	.....	413,794
United States	2,701,651	.....	.....	1,199,202
Total	6,745,177	3,435,552	2,009,602	4,282,110

It must not be inferred from the absence of statistics in regard to some of the above articles that there are no imports into the countries mentioned. They are either covered in the general heading "All other imports" or are classified in some other way.

Principal exports to Philippines.

Countries.	Cotton manufactures.	Silk manufactures.	Woolen manufactures.	Apparel.
Great Britain	$1,268,087	$12,205	$17,943	$6,273
France	143,223	81,720	2,493	3,912
Germany	111,028	43,792	44,268	99,246
Japan	120	4,418	.....	157
United States	2,164	.....	.....	.....
Total	1,524,622	142,135	64,704	109,588

Countries.	Machinery.	Metals and manufactures of.	Coal.	Provisions.
Great Britain	$151,630	$185,413	$16,856	$79,455
France	10,353	5,035	.....	.....
Germany	29,036	146,370	.....	31,654
Japan	250	398	40,996	7,429
Total	191,269	337,216	57,852	118,538

Tables giving the details of trade with the various countries are given below:

COMMERCE OF GREAT BRITAIN.

The annual statement of trade of the United Kingdom for 1897 (it should be noted that the British figures cover the Ladrone Islands) has the following:

Year.	Imports from Philippines.	Export to Philippines.
1893	$10,607,491	$3,522,061
1894	7,948,085	3,117,744
1895	7,836,918	2,023,505
1896	7,477,538	2,470,240
1897	6,223,426	1,947,598

To these exports, which represent the produce and manufactures of the United Kingdom, should be added the foreign produce which passes through British ports. The figures for these last-named exports for the years given were: In 1893, $268,000; 1894, $162,000; 1895, $135,000; 1896, $144,000; 1897, $116,000.

Imports from Philippines, 1897.

Articles.	Value.	Articles.	Value.
Gum, of all sorts	$31,185	Nuts and kernels for expressing oil therefrom	$222,404
Hemp, dressed, undressed, and tow	3,694,214	Sugar, unrefined	1,512,703
Tobacco:		All other articles	46,153
Unmanufactured	226,939	Total	6,223,426
Manufactured	489,828		

Exports to Philippines, 1897.

Articles.	Value.	Articles.	Value.
Alkali	$21,870	Machinery and millwork	$151,630
Apparel and haberdashery	6,273	Metals:	
Carriages, railway	4,540	Iron, wrought and unwrought	160,030
Coal and cinders, etc	16,856	Copper	23,583
Cotton yarn	169,603	Oil seed	10,901
Cottons:		Painters' colors and materials	33,623
Entered by the yard	962,780	Pickles, vinegar, sauces	6,745
Entered at value	133,104	Provisions	27,510
Earthen and china ware	15,719	Saddlery and harness	2,628
Glass manufactures, unenumerated	6,142	Silk manufactures	12,205
Hardware and cutlery	7,879	Woolens and worsteds	17,943
Hats of all sorts	535	All other articles	100,386
Leather, wrought and unwrought	15,018	Total	1,947,598
Linens, entered by the yard	40,095		

The principal articles of foreign produce which passed through British ports en route to the Philippines in 1897 were: Cheese,

$18,000; cotton manufactures, $2,600; hams, $12,000; iron and steel manufactures, $1,800; condensed milk, $12,600.

Indigo was formerly imported from the Philippines into Great Britain (to the value of $39,000 in 1893), but does not appear in reports for recent years. Unwrought copper and dyewoods have also decreased in import.

COMMERCE OF FRANCE.

According to statistics published in the Tableau Générale du Commerce et de la Navigation for the years from 1893 to 1896 (the edition for 1897 not having been received), the trade with France has been as follows:

Year.	Imports from Philippines.	Exports to Philippines.
1893	$694,800	$2,258,100
1894	1,080,800	2,026,500
1895	1,428,200	1,697,100
1896	1,990,297	359,796

The details of trade in 1896 were:

Imports from Philippines.

Articles.	Value.	Articles.	Value.
Cocoanuts and kernels	$1,787,198	Shells	$5,536
Hemp	76,754	All other articles	3,701
Tobacco	86,451	Total	1,990,297
Gum and resins	22,281		
Oils, volatile, and essences	8,376		

Exports to Philippines.

Articles.	Value.	Articles.	Value.
Cotton manufactures	$142,267	Wine	$5,075
Silk manufactures	81,721	Metals and manufactures of	5,035
Woolen manufactures	39,813	Paper	4,720
Jewelry, etc	12,916	Apparel	3,912
Machinery and parts of	10,753	Medicines	3,667
Copper and manufactures of	7,699	All other articles	29,564
Toys and buttons	6,391	Total	359,796
Thread	6,263		

A much larger proportion of foreign goods, it appears, passes through French than through British ports to the Philippines. Foreign cotton goods figured in the exports for $137,860; silk manufactures, for $39,733; metals, for $633; cotton thread, for $5,363; paper, for $1,802; and woolen manufactures, for $2,493. The total

value of foreign goods exported from France to the Philippines in 1896 was $195,898, while the French exports amounted to $163,898.

COMMERCE OF GERMANY.

Statistics covering only two years—1895 and 1896—are available. They are taken from the editions of Auswärtiger Handel for those years, and comprise the foreign products which were exported from German ports, as well as those of domestic manufacture. The large majority of the exports, however, are of German origin; the value of the foreign articles being represented by only $29,988 in 1896. Cotton goods and groceries were the only items of importance in the transit trade. It should be noted that the German statistics include the trade with other Spanish possessions in Oceanica.

Imports from Philippines.

Articles.	1895.	1896.
Dyewoods	$11,662	$3,332
Iron and ironwares	.....	238
Flax, hemp, dressed and undressed	126,378	166,600
Wood and its manufactures	476	.....
Tobacco and its manufactures	19,516	31,654
Gums of all sorts	47,362	21,658
Other articles	238	238
Total	205,632	223,720

Exports to Philippines.

Articles.	1895.	1896.
Cotton and cotton goods	$54,978	$110,908
Wool and woolen goods	30,461	44,268
Silk and silk goods	17,850	43,792
Apparel and haberdashery	88,060	99,246
Brushes and sieves	32,368	23,324
Drugs and dyes	51,170	44,744
Iron and articles of	170,646	128,996
Crockery	12,376	21,896
Glass and glassware	15,946	11,186
Wood and manufactures of	21,420	15,946
Instruments and machinery	60,214	29,036
Copper and manufactures of	57,358	17,374
Hardware	40,364	68,782
Groceries, etc	21,896	31,654
Paper and manufactures of	27,132	25,942
Pottery	8,330	20,706
All other articles	51,884	37,128
Total	762,453	774,928

COMMERCE OF SPAIN.

The figures covering Spain's trade with the Philippines are taken from Spain's Foreign Trade, Frank H. Hitchcock, Department of

Agriculture, 1898. The imports and exports for the five years from 1891 to 1895 were:

Year.	Imports from Philippines.	Exports to Philippines.
1891	$4,342,009	$2,712,515
1892	4,450,492	3,655,398
1893	4,013,643	4,378,530
1894	3,473,004	5,516,735
1895	4,819,344	4,973,589

Details of the trade by articles are not given, except in certain imports from the Philippines:

Year.	Tobacco.	Sugar.	Coffee.
1891	$2,605,987	$216,909	$860,481
1892	3,511,303	301,888	440,895
1893	2,632,816	272,953	153,832
1894	2,138,068	389,724	231,541
1895	2,533,150	413,794	107,656

COMMERCE OF JAPAN.

The Annual Return of Foreign Trade for 1897 has the following figures:

Imports from Philippines.

Articles.	Value.
Coffee	$3,020
Sugars	1,156,411
Flax, hemp, jute, and textiles	100,993
Cigars, cigarettes, and tobacco	64,477
All other articles	7,399
Total	1,332,300

Exports to Philippines.

Articles.	Value.	Articles.	Value.
Cotton and manufactures of	$120	Fans	$5,410
Silk and manufactures of	4,418	Matches	7,599
Apparel and haberdashery	157	Bronze, copper, iron, and tin wares.	398
Fish, dried and salted	90	Paper, porcelain, and other wares	12,634
Beans, rice, potatoes, and other vegetables	6,471	All other articles	12,160
Beer, liquors, and other beverages	638	Total	91,093
Coal	40,996		

To the exports should be added the values of foreign products passing through Japan in 1897, which amounted to $1,730. Provisions figured in this total to the value of $230; subnitrate of bismuth, $770; and dynamo-electric machinery, $250.

COMMERCE OF CHINA.

The Returns of Trade for 1897, issued by the Imperial Maritime Customs, has the following details:

Imports from and exports to Philippines.

Year.	Imports.	Exports.
1893	$25,269	$172,788
1894	64,443	160,175
1895	12,944	125,308
1896	13,894	103,960
1897	56,137	97,717

Details of the trade by articles are, unfortunately, not available.

COMMERCE OF BRITISH INDIA.

The trade for the four years ending in 1896, according to the Statistical Abstract for the Colonies of the United Kingdom, 1897, was:

Imports from and exports to Philippines.

Year.	Imports.	Exports.
1893	$9,017	$56,979
1894	6,297	47,495
1895	8,533	69,748
1896	7,755	80,156

The chief articles of import and export in 1896 were:

Imports from Philippines.

Hemp and manufactures of	$4,965
Tobacco and manufactures of	3,053

Exports to Philippines.

Drugs and dyewoods	$80,149
Opium	80,109

British returns estimate the value of the rupee at 2s. (48.6 cents). In making the above reductions, however, the valuation of the rupee as given by the United States Director of the Mint is taken, the average of which for 1896 was 23.4 cents. According to the British

estimates, the trade of India would be more than double the values above given.

COMMERCE OF THE STRAITS SETTLEMENTS.

The figures for the trade with the Philippines, also taken from the Statistical Abstract, include other Spanish possessions in Oceanica:

Year.	Imports from Philippines.	Exports to Philippines.
1893	$385,091	$372,229
1894	496,442	484,134
1895	490,602	422,607
1896	274,130	236,001

COMMERCE OF NEW SOUTH WALES.

According to the New South Wales Statistical Register for 1897, the trade for the last five years has been as follows:

Year.	Imports from Philippines.	Exports to Philippines.
1893	$4,141	$82,268
1894	38,844	168,687
1895	74,024	90,531
1896	87,617	125,950
1897	119,550	176,858

In the exports for 1897, domestic produce and manufactures figured for $175,272; foreign produce, for $1,586.

COMMERCE OF VICTORIA.

The Statistical Abstract for the Colonies has the following:

Year.	Imports from Philippines.*	Exports to Philippines.
1893	$18,848	$1,298,521
1894	472	1,350,040
1895	6,103	1,054,707
1896	180	178,370

* Including other Spanish possessions in Oceanica.

COMMERCE OF UNITED STATES.

The following figures are taken from the Monthly Summary of Finance and Commerce, April, 1898, Bureau of Statistics, Treasury Department:

Imports from Philippines.

Articles.	1892.	1893.	1894.	1895.	1896.	1897.
Free of duty.						
Sugar, cane and other	$2,417,109	$2,865,966	$3,655,627	*$67,200	(*)	(*)
Textile grasses, etc., Manila	3,798,842	6,217,192	3,324,223	3,572,236	$2,499,494	$2,701,651
All other free articles	23,691	34,012	12,514	18,516	99,526	374,406
Total free of duty	6,239,642	9,117,170	6,992,364	3,657,952	2,599,020	3,086,057
Dutiable.						
Sugar	(†)	(†)	(†)	1,043,806	2,270,902	1,199,202
All other dutiable articles	69,011	42,687	15,978	29,608	112,935	98,481
Total dutiable	69,011	42,687	15,978	1,073,414	2,383,837	1,297,683
Total imports of merchandise	6,308,653	9,159,857	7,008,342	4,731,366	4,982,857	4,383,740

* See dutiable. † See free of duty.

Exports to Philippines.

Articles.	1892.	1893.	1894.	1895.	1896.	1897.
Domestic merchandise.						
Cotton, manufactures of	$6,483	$8,444	$45,761	$3,355	$9,714	$2,164
Oils, mineral, refined	43,001	105,936	35,495	67,837	89,958	45,908
Varnish	1,530	2,442	191	2,605	1,500	2,239
All other articles	9,900	37,556	64,019	45,458	61,169	44,286
Total domestic merchandise	60,914	154,378	145,466	119,255	162,341	94,597
Total foreign merchandise	.....	.....	.....	.....	105	.....
Total export of merchandise	60,914	154,378	145,466	119,255	162,446	94,597

The trade of the United States with Spanish Oceanica, given in the same publication, was:

Year.	Imports from Spanish Oceanica.	Exports to Spanish Oceanica.
1896	$5,320	$11,244
1897	5,047	.....

COMMERCE VIA HONGKONG.

Besides the direct trade with the Philippine Islands, a large number of articles passes via Hongkong and is credited to that port. Hongkong being a free port, no special statistics as to the extent or value of its trade are compiled. The official returns of the countries named show imports and exports in 1897 as follows:

Countries.	Imports from Hongkong.	Exports to Hongkong.
Great Britain	$2,950,627	$10,120,081
United States	923,842	6,060,039
China	66,666,119	45,923,809
Japan	5,989,544	12,989,269
British India *	4,723,484	1,956,065
Straits Settlements *	10,563,152	5,860,614
New South Wales	372,132	903,227
Victoria *	328,848	254,533

*In 1896.

The German, French, and Spanish statistics do not mention Hongkong; but it will be seen that the trade of the other countries is very considerable, and, as the local consumption of the port is comparatively small, almost all the merchandise is transshipped. In Commercial Relations, 1894–95 (Vol. I, p. 90), an estimate of the total trade of Hongkong for the year 1893–94 is made, which covers all the countries above mentioned with the exception of New South Wales and Victoria, and which approximates the trade of "all other countries" at $30,000,000 in imports from Hongkong and at $25,000,000 in exports to Hongkong. The Statesman's Year Book, 1898, says that of the total imports into the Philippines, about 21 per cent comes from Hongkong and Amoy. Assuming that the trade of Hongkong with "all other countries" had the same value in 1897 as in the fiscal year 1893–94 (it is probable that it increased), the importance of this addition to the trade of the Philippines is obvious.

IMPORTS OF SHOES INTO THE PHILIPPINES.

The latest customs statistics of the Philippines show that the imports of foot wear for the year 1894 amounted to 183,475 piasters* ($94,306).

*Mexican currency being used in the Philippines, the "piaster" in this report probably means the Mexican dollar. The reductions have been made on this basis, the average value for 1894, according to Treasury estimates, being 51.4 cents.

The following table shows the different kinds and value of such imports; also the participation of the several countries in the trade:

Country.	Boots and shoes of leather and canvas.			Boots and shoes of patent leather and calfskin.		
	Number of pairs.	Value.		Number of pairs.	Value.	
		Piasters.			*Piasters.*	
Spain	8,955	18,263	$9,387	50,324	57,415	$29,511
Germany	2,441	5,020	2,580	13,113	17,385	8,935
Austria	.....	.....	.....	45	60	30
China	72	145	74	4,013	5,335	2,742
Egypt	149	290	149	570	740	380
France	505	1,010	519	4,730	6,300	3,238
England	425	945	485	8,437	11,570	5,946
Japan	.....	.....	.....	3	5	2
Switzerland	9	20	10	9	25	12
Total	12,556	25,693	13,204	81,244	98,834	50,796

Country.	Slippers and common shoes worn by Chinese.			Foot wear for children.		
	Number of pairs.	Value.		Number of pairs.	Value.	
		Piasters.			*Piasters.*	
Spain	3,887	2,026	$1,041	60,816	38,822	$19,954
Germany	1,594	800	411	2,928	2,210	1,135
China	14,712	7,980	4,101	40	40	20
Egypt	.....	.....	.....	46	40	20
France	906	450	231	2,694	1,815	932
England	4,933	2,465	1,267	3,152	2,050	1,053
Japan	155	80	41	.....	.....	.....
Singapore	344	170	87	.....	.....	.....
Total	26,531	13,971	7,179	69,676	44,977	23,114

From the above table it will be seen that the United States does not figure in the boot and shoe trade of the Philippine Islands. Spain, protected by laws that discriminate against all foreign products, has furnished nearly all the boots and shoes disposed of in the archipelago. The United States being the largest manufacturer of boots and shoes, our manufacturers should prepare for trade with the Philippines.

HENRY W. GILBERT,
Consul.

LIEGE, *July 5, 1898.*

THE CAROLINE ISLANDS.

Consul Doty, of Tahiti, under date of July 8, 1898, sends a communication from Mr. F. W. Christian, of the Polynesian Society of Wellington, New Zealand, a well-known explorer in the central Pacific. The letter contains an interesting description of the Caroline Archipelago and is given as follows:

Spanish Micronesia, according to the treaty made with Germany in 1885, lies between the equatorial line to the south and the eleventh northern parallel and the meridians 139° 12′ 24″ and 170° 12′ 24″ eastern longitude. Six hundred and fifty-two islands lie scattered over this wide stretch of sea. The Spanish do not place the Mariannes (Ladrone Islands) in Micronesia; the large southernmost island, Guam or Guajan, lies some 550 miles to the north of Lamotrek. The Caroline Archipelago consists of thirty-six minor groups, of which the nine following are the principal: The Palaos or Pelews, Yap, Uluthi, Uleai, Namonuito, Hogolen or Ruk, the East and West Mortlocks, Bonabe or Ponapé, and Kusaie, otherwise called Ualan or Strong's Island. We will take them one by one, following the order from west to east.

The Pelew group contains some two hundred islands and islets. The principal island is Bab-el-Thaob, which in area is equal to all the rest put together. The most important of the rest are Korror, Uruk-Tapel, Malk, Peleleu, and Angaur. The population of the Pelews is estimated at some 3,000, but is probably much more. The language is a very peculiar and bizarre Malayan dialect, somewhat akin to that of the Sulu Archipelago. The principal products are turtle-shell, copra, and bèche de mer (*Holothuria*), which in the Chinese markets brings as much as $400 gold per ton. There is always civil war going on in the group between the various tribes, and a firm hand is needed to keep things in order here. Captain Butran, of the *Velasco* (lately sunk at Manila), who visited the group in 1885, gives these natives a good name. Captain O'Keefe, however, a wealthy trader of Yap, gives them a doubtful reputation, putting them down as a folk of piratical and turbulent character. The enormous quartz wheels, the famous and curious stone money of Yap in this group, were quarried in the Island of Kokial. In olden time there was great commercial activity here, and the Yap and Pelew folk went on extended voyages of trading and conquest. Bab-el-Thaob is rich in good timber. Great quantities of yams, breadfruit, and cocoanuts are grown. Alligators are found in some of the creeks, and a peculiar kind of horned frog. There are two kinds of snakes, which the natives call Bersoiok and Nguus, both somewhat venomous. There is abundance of good pasture for horses and cattle. Goats are plentiful, probably introduced by the early Malayan settlers. The Spanish have done next to nothing to show their occupation, and everything goes on much as before. There is no Spanish garrison. The country is well worth opening up to honest and energetic trade. All that is needed here is a little firmness with the petty local rajahs, as with their cousins of British North Borneo and the Dyaks, whom they much resemble. A fringing reef 53 miles long from north to south surrounds the Pelews—a menace to navigators which has destroyed many a Macao-bound vessel.

Some 300 miles northeast of Pelews are Yap and the other islets of the group, of which Ramung to the north (resident trader, Captain Brugmann), and Tarrang to the south (resident trader, Captain O'Keefe), and Engnoch (resident trader, E. Oppenheim-Girard, of the Jaluit Gesellschaft) are the principal. Yap is surrounded by a coral reef 35 miles long by 5 broad. There are hardly any rivulets,

but inland are extensive swamps, carefully planted with the water-taro (colocasia). The island is full of relics of a vanished civilization—old embankments and terraces, sites of ancient cultivation, stone-paved roads; paes or ancient platforms of stone, faced with huge circular quartz wheels, set up at their sides; enormous council lodges of quaint design, with bold, high, and projecting gables, and lofty carven pillars. Walls of ancient fish ponds and stone weirs fill the lagoon between the reef and the shore, making navigation a difficult matter. There are some 8,000 natives on Yap—kindly, industrious, and generally peaceable folk, very dark in color, and speaking a quaint and barbarous dialect, much akin to that of the Pelews, yet with a certain family likeness to the isles farther eastward, where the Polynesian infiltration appears to have been fairly strong. The fruits of the soil are as follows: Sweet potatoes, yams, of which there is a great variety; taro (lak), mammee apples or pawpaws, pineapples, bananas (pao), sugar cane (maquil), breadfruit (thau), and the tropical almond (*Terminalia catappa*). Copra is largely exported, mostly through the German traders, who have spent a vast amount of money and labor here for many years past. A varnish nut (adhidh) grows here, which should give good results. The principal timber tree is the tamanu, fetau or kamani of South Sea Islands, the *Callophyllum* of botanists; the Yap natives call it "voi." Tomil Harbor is the place of the European settlement, the seat of the Spanish governor of the western Carolines. There is a garrison of some 100 soldiers, with probably some 150 political prisoners, captured in the late Philippine uprising. Tomil would be a good coaling station. Yap is rich in beautiful scenery, the groves of bamboo, croton, cocoanut, and areca palm being most impressive. Huge iguanas are found in the bush, and the nights are brilliant with fireflies (kirrikir). Bird life, however, is somewhat scarce, and there are but few cattle and horses on the island.

The Uluthi, or Mackensie, group lies a little to the northward of Yap. Mokomok or Arrowroot Island is the chief port and trading place. There is a great trade in copra here. The longitude is 145° 58′ 24″ east, and latitude 10° 6′ north. The natives, since ancient times, are subject to Yap, and come down about February each year to pay tribute to the chiefs of Tomil and Gochepa. They are peaceful, industrious, and law-abiding, a great contrast to the people of Pulawat or Enderly farther to the eastward, who have an ill name as merciless and treacherous pirates throughout the length and breadth of the Carolines.

The Uleai natives are better, but not quite trustworthy either. Raur, the trading depot of this group, lies in 150° 9′ 54″ east longitude. Much copra is produced, and turtle-shell and bèche de mer (pelipel) are collected. There are about 800 natives in this group. The language is Malayan mixed with Polynesian. The people of Olimarao, Lamotrek, and Satawal have similar traditions, customs, and language. These islanders were intrepid navigators in olden days, guiding their way fearlessly by a most accurate knowledge of the stars and currents. When the Spanish conquered the Mariannes, about 1560, a great number of the Chamorros, or aboriginal people, fled to Uleai and Lamotrek, to avoid forcible conversion and slavery. According to Kotzebue, the Uleai folk and their neighbors assemble at Lamotrek every year in February, with eighteen or twenty great canoes, sailing thence to Guam, a distance of some 500 miles, in about three days. They stay until April or May and then return, fearing the southwest monsoon.

The Hall group, or Namonuito, and the group to the south, of which Pulawat and Pulo-Suk are the chief islands, are only to be visited with considerable precaution. It would be well for a man-of-war to visit here and warn the petty chiefs against piratical forays or cutting off peaceful trading vessels in their lagoons. The Spanish have taken little or no notice of several treacherous murders committed of late years, and seem disposed to let things still go on in the same haphazard fashion.

The next group eastward is called Ruk, or T'ruk, from the name of the tallest basaltic island in the chain (Ruk means "highland" or "lofty"). The group consists of some seventy islands lying in the midst of the great lagoon of Hogolen, which name is also applied by some to the whole group. The lagoon is 210 kilometers (130.48 miles) round, and there is a fine depth of water and good anchorage for vessels of large draft. There is a great annual output of copra. Pearl shell, turtle-shell, and bèche de mer are very abundant. The well-known island preparation of "taik," a red cosmetic, is made here. There are thirty Japanese traders established in the group, and the German trading firm of Jaluit sends many vessels to fill with copra. The group has a population of some 10,000. Each island has its petty rajah, whom they call, in the various Caroline dialects, tamon, tamol, samon, samol, samal, or chamero. There has been a certain amount of civil war here of late, much to the prejudice of local industries. The Spanish have not kept a firm enough hand on the people. The principal island of Ruk lies in 158° 1′ east longitude and 7° 18′ 30″ north latitude.

The natives, both of Ruk and the neighboring group of the Mortlocks, have the curious custom, remarked in the Visayas of the Philippines, the Peruvian Indians, and the Taringa-Roroa aborigines of Easter Island, of piercing the lower lobe of the ear and forcing it to grow downwards in a huge, unsightly flap. The Mortlock language is the Lingua Franca of the central Carolines. Here is found a very large Polynesian admixture. The Island of Losap, some 80 miles east of Ruk, has an ill reputation of late. It was colonized by a roving band of pirates from Chokach or Jekoits on the Penapé coast, and is said to have all the old savage customs. The Mortlocks consist of three groups. Lukunor lagoon, containing eighteen islands, is surrounded by a reef 54 miles in circuit; the harbor, Port Chamisso, being in 160° 10′ 24″ east longitude and 5° 20″ north latitude. The second Mortlock group is Satoan. The lagoon contains sixty well-populated islands. It is in 159° 58″ east longitude and 5° 17″ north latitude. The third is Etal, comprising eighteen low coral islets surrounded by a reef some 20 miles in circuit, and situated in 160° 1′ east longitude and 5° 33′ north latitude. The population of the whole group is some 2,000. The products are copra and bèche de mer. The Germans take great pains to develop industry here. Of remarkable interest to philologists is the occurrence of a pure Polynesian dialect, apparently an antique form of Samoan, upon two islets named Greenwich and Kap-in-Mailang, otherwise called Nuku-Oro, lying to the south southeast of Port Chamisso. The Spanish call them Pescadores. The inhabitants, numbering some 500, are honest, cheerful, and industrious. The situation is 161° 3′ east longitude and 1° 6′ north latitude.

We now come to the far eastern groups in the great chain, where the one hundred and seventieth north parallel divides the Spanish possessions from those of Germany. The most important is that of Seniavina, Bonabe, or Ponapé, which includes the Ant and Pakin islands and the large island of Ponapé (in native, "Panu-Pei," or the Land of the Holy Places), so called from the remarkable relics of ancient civilization found near Metalanim Harbor, on the east coast. It is situated between north parallels 6° 43′ and 7° 6′ and meridians 163° 55′ and 164° 32′ east longitude. The Island of Ponapé occupies 440,000 square kilometers (170,324 square miles). It is surrounded by an extensive reef, shutting in a wide lagoon studded on the north and southwest with many small islets. The country is occupied by five wei, or tribes, under their hereditary chiefs: U to the north, under their Ichipau or titular king, a great friend of the English-speaking folk; Metalanim to the east, ruled by their Ichipau, King Paul, a gloomy, morose old man, a great hater of the "macha puotopuot," or white faces, and the promoter of all the late troubles and acts of bad faith in the tribe; Kiti, to the south and southwest, under the rule of the Nanamareki, King Rocha, a good friend to the white men; Henry Nanapei, of

Ronkiti, is also an influential man in the tribe. The Spanish governor very sensibly tried to make this enlightened man the chief authority over all the tribes. He is a man of good education and great influence for good, and has greatly developed local industries in Kiti. The territory of Chokach or Jekoits, in the northwest, embraces the lofty island of that name; also Mount Paliker and the valley of the Palang River on the mainland. The Pakin Islands, with their cocoanut groves, are also a dependency of the Prince of Chokach. The last and the least of the tribes is that of Not, under the chief Lap-in-Not. The people live near the embouchure of the Pillapenchakola Creek, where it runs into Asuncion Bay in the north. On Asuncion Bay is the little Spanish colony of Santiago, with its slenderly garrisoned blockhouse and walled fort. The most important islets off the Ponapé coast on the north are Langar, where the Germans have a trading station; Parram, Tapak, and the two dependencies of the Ichipau of U. Mutok, at the mouth of the Kiti River, in the south, has a good harbor, and was formerly much visited by whalers. Near Metalanim Harbor, on the east, close to the Ichipau's Island of Tomun and the Sugar Loaf Peak, overlooking the bay, is a great artificial breakwater, nearly 3 miles long, inclosing some fifty walled islets, separated one from another by a network of shallow canals—a regular Micronesian Venice. The place is called Nan-Matal, or the Place of the Waterways. On two of the islands—Nan-Tauach and Pankatara—are high walls inclosing an ancient sanctuary, where excavations made by us in 1896 brought to light a large number of stone and shell weapons and other relics of the past. The walls on Nan-Tauach inclose a double parallelogram, the outer measuring some 220 by 180 yards. The height varies from 40 to 20 feet; the thickness from 12 to 16 feet. Some of the basaltic prisms are of immense size and weight. The construction is alternately lengthwise and crosswise, like that of a log fence. The natives look upon these precincts with superstitious awe, and can hardly be persuaded to go near them at night. It was in the neighborhood of these ruins that the Spanish had two days' hard fighting, in 1890, to capture the fortified stockade of Ketam, on the Chapalap River, at the head of the bay. A little northeast of the King's Isle of Tomun is a peculiar island named Mutakaloch, where the basalt takes a cellular form. On the northeast border of U and Metalanim is the picturesque Island of Aru, close to the harbor of Oa, with its intricate and tortuous entrance, where the Spanish won a hard-earned victory over the Metalanim insurgents on the 20th of September, 1890. Port Lot, the residence of a local chief, David Lumpoi, a great scoundrel and deserving of no trust whatever, was a place of visit for the New England and New Bedford whalers. The water supply here is poor, provisions are ridiculously dear, and the natives of this particular district for the most part notorious rogues and thieves. Port Mutok, at the mouth of the Kiti River, is good for wood and water; provisions are cheap and the natives honest and well disposed. Henry Nanapei, of Ronkiti, King Rocha of Kiti, his nephew Nan-aua, the Nan-keron of Mutok, and others have set the Kiti natives a noble example of fair dealing. The harbor of Ronkiti is some 15 miles to the west of Mutok. Henry Nanapei is the harbor master here. The entrance is in 6° 48′ north latitude and 164° 19′ east longitude. There are plenty of pigs and fowls; yams, cocoanuts, bananas, and other tropical fruits may be procured here at moderate prices. Nanapei has planted the beautiful valley with cocoanuts and bananas. There is a well-attended Protestant mission school.

A useful measure would be the distribution of seeds to the more enlightened chiefs of districts, and they might be encouraged in draining the morasses, opening up proper roads, and keeping clear the water ways and passages in the great surrounding belt of mangrove scrub. The interior needs opening up, and the dense mountain jungle and forest thinning out with axe and sawmill.

The late history of British Fiji seems to show very well how a great island can

be opened up to trade and industry by keeping native chiefs of known character and capacity in authority; not by treating the chiefs as children and paying them monthly salaries to keep them in good humor, as the Spanish have done. It should not be forgotten that there is an ancient tribal jealousy between Kiti and Metalanim, the two most populous tribes, and that there is a very substantial ill will between Chokach and Metalanim, on account of a piece of thoughtless insolence and braggadocio shown by a party of King Paul's braves, who landed on the island while the men were away fishing and helped themselves liberally to other people's property, badly scaring the women and children.

The chief products of Ponapé are copra, turtle-shell, and ivory nuts. The last is the fruit of the och, an elegant palm resembling a sago palm, used for manufacturing buttons. Another valuable economic tree, the "ais," is found bearing a large, circular, reddish-brown nut, which makes good varnish. Sponges are obtained on the Paliker coast, near Palang, on the west, and bèche de mer of good quality is found on the outer reefs off the Kiti and Metalanim coasts. The forests inland and salt marshes below are fairly rich in timber trees and wood useful for ornamental work. There are plenty of pigs ("puik") and dogs ("kiti"), some of them tailless, the latter much esteemed for food by the folk of Metalanim. On Mutok there are goats, and in the Ronkiti Valley Nanapei grazes some cattle. The rivers are full of fish. There are eels of gigantic size and greatly dreaded by the natives, who will not eat their flesh. A venomous green snake, "macho," is found occasionally in the salt marshes. There are several sea snakes and sea eels, some very beautifully colored. The sea is full of all manner of quaint, bizarre, and gorgeous forms of marine life. There are many vegetable treasures in the bush, possessing very valuable medicinal properties. The pineapple, mango, sugar cane, and several sorts of bananas and plantains, as well as yams and taro, grow abundantly. Breadfruit grows also in great magnificence, especially on the upper coast.

Further east from Ponapé are the Mokil (or Duperrey), the Pingelap (or McCaskill), and the Kusaie groups—the last of the Spanish dominions in Micronesia.

Here I think I can not do better than call attention to an extract from the Hongkong Telegraph, containing a description of my late cruise in these out-of-the-way seas.

In conclusion, I would like to express the opinion that a great deal may be done with the islands of Kusaie and Ponapé, both of which deserve the name of the garden of Micronesia. Ruk and the Mortlocks, Yap and the Pelews also demand notice.

F. W. CHRISTIAN.

TENTERFIELD HOUSE, PUTNEY HILL,
London SW., England.

TOURING IN THE CAROLINES.

[Extract from Hongkong Telegraph.]

* * * * * * *

Mokil is properly a group of three low islands—Urak, Manton, and Kálap—lying close together in a lagoon of no great extent. Manton is rounded in outline like a boomerang or horseshoe; Urak and Kálap are longer and crescent shaped. Kálap and Manton are inhabited, the former containing the main settlement, surrounded with yam and taro patches. Urak is one wild-palm grove, full of pigs and wild fowl, and is often visited from the main settlement. Between Manton and Urak a narrow boat passage leads up to Kálap beach, across a strip of flat reef almost dry at low tides, studded with numerous masses of honeycombed

limestone rock. Close by are two large blocks. Tradition says the Ant, or demi-gods, in the form of a pair of frigate birds, brought them from the eastward. These were the mythical ancestors of the Mokil people.

The Mokil folk, numbering some 200, probably have a strong Marshall Island admixture, like their Pingelap neighbors. Many of their words are an obsolete form of Ponapéan; but nowadays the modern Ponapéan is everywhere spoken, introduced by the American missionaries and native teachers from their former station on the larger island. The natives are Christianized; cocoanut toddy is tabooed, and all use of intoxicating liquors and tobacco strictly forbidden. The king, or icho, lives on Kálap and is a friendly old gentleman; but, like nearly all converted natives, has a keen eye for business. The chief trader on the island is John Higgins, a capital boatbuilder and carpenter, the son of a Massachusetts man, afterwards murdered upon Pingelap by a Gilbert Islander from Arorai. He leads as quiet and industrious a life as any Norfork or Pitcairn Island settler. There is no supply of running water; but there is a heavy annual rainfall, which the natives make the most of by digging numerous shallow pits and wells. A peculiar species of jack fruit is cultivated, along with abundance of bananas and taro (*Arum*, sp.) of two kinds. The palm groves yield an abundant supply of green drinking nuts, and much copra is made from the kernels of the older ones. The lagoon teems with fine fish, the most esteemed of which are a species of mullet, the bonito, and the flying fish. The Mokil canoes are built of seasoned breadfruit wood, fitted with a long, solid, and heavy outrigger, curving boldly upwards bow and stern, recalling somewhat the Yap canoes, without, however, the curious fish-tail ornamentation on the figureheads fore and aft. Their yi, or sails, like the old-fashioned ones of Ponapé (called I), are wide and triangular, formed of parallel rows of pandanus leaves neatly sewn together. The usual littoral shrubs common on low coral islands flourish here, amongst them two medicinal in quality, the ramak and sisin (known in Ponapé as the inot and titin). The bitter, fleshy leaves of the former in decoction are a fine tonic and febrifuge, whilst the pounded bark of the latter is said to be a good application for sores and wounds. The quaint whorls of giant screw pines (*P. edulis*), with their huge, orange-red, rough pineapples and long, sword-shaped, prickly-edged leaves, fringe the shore, and the air is filled with the subtle perfume of the delicate white blossoms of the tree gardenia (*Pur.*).

After a stroll in the woods, a bath in one of the water holes, and a hearty meal of fried flying fish and taro, it is time to leave. Towards evening, with a good load of copra and some of the Urak porkers, and seven or eight native passengers on board, we set sail for Pingelap, which lies some 60 miles to the southward. Next day nothing but dismal and dirty weather and heavy seas. A powerful odor of copra permeates the ship from stem to stern, which must be extremely delicious to those who are accustomed to it. Everything is hot, damp, muggy, and uncomfortable. Hosts of lively beetles are on the warpath below, and up above there is a dark drizzle, hardly a breath of wind stirring, and the great cradle of the deep is rocking us to and fro in something more than a motherly fashion. So the long, dreary afternoon wears itself slowly away. Late in the evening of the next day, after a steady struggle with a strong northwest current, we catch a glimpse of the lights of the Pingelap canoe parties fishing out on the reef. Next morning early we are anchored near the beach, and numerous folk have already boarded us, clamoring for an extended credit system, hugely excited the while at the prospect of handling and fingering, and perhaps even purchasing, the much-coveted foreign goods. Voices, a regular Babel, are raised, some in solemn argument and serious questioning, some rippling into light jests, chaff, and repartee, some melting into those coaxing, pleading, and wheedling accents wherewith the natives so often reach the soft spot in the white trader's heart. However, by and by business is somehow

concluded at last. Some natives make small payments, some pay liberally in promises and compliments, whilst some again are refused credit altogether, and away they troop into their canoes and go ashore evidently in high feather. After awhile we go ashore in the ship's boat, pencil and notebook in hand, as beseems seekers after strange things, to the exceeding curiosity and wonder of the worthy folk on the beach who, for naïve and rustic stolidity and ludicrous ignorance, are the very Bœotians of the Pacific. The following rough notices were taken:

The group consists, like Mokil, of three low coral islands lying close toget her named respectively Pingelap, Taka, and Chikuru. Population, a little over 1,000; pretty dense considering the meager area. Natives midway between the Ponapé and Mokil type. Language, a harsh and antiquated dialect of Ponapéan. As in Mokil, however, the new missionary Ponapéan, introduced in the lesson books and New Testament translations and songs, is fast ousting the old language. Most of the inhabitants here live on the main central island, which is neatly laid out in shady walks and avenues, skirting trim and well-kept plantations of bananas and various sorts of taro. Plenty of arrowroot is found in the bush. The cocoanut groves are very productive, and in profusion are found two varieties of jack fruit, one with slightly, the other deeply, serrated leaves. The sea swarms with fish, and there are plenty of pigs and fowls. The number of bright, healthy young children playing about the landing place gave a very pleasant and encouraging testimony of the vigor and vitality of the race—a quality now, alas, growing rarer and rarer amongst the South Sea Island peoples.

* * * * * * *

Next morning we sight the Island of Lele, with its spacious harbor. Hereabouts a powerful current runs, setting to the eastward, which any future navigators will do well to remember, giving the point a pretty wide berth to avoid stranding amongst mighty breakers on a dangerous coast. The main island reminds one somewhat of Rarotonga, with the bizarre features a little softened down. The altitude of Fulact, the highest peak, is about the same, some 2,300 feet. In the middle are two needle-shaped peaks set close together. A belt of rich lowland surrounds the spurs and goyals and dells, running up behind into verdant hill slopes, thickly clothed with forest up to the summit. Here and there one spies scattered native houses lying back amongst groves of pandanus and palm.

* * * * * * *

We come close up to the settlement, with the King's new lumber and shingle house standing forward prominently amongst many humbler abodes under the shade of a noble callophyllum tree (the South Sea magnolia). Seaward extends the wharf, built up sturdily of flags and blocks and lumps of coral and basalt fragments, with pebbles and seashells.

Numbers of natives are passing and repassing on the road beyond, for it is Sunday and church time is nigh. The men are neatly dressed in European garb, the women in loose, graceful gowns, with a total absence of the vulgar tawdriness of Tongan or Samoan dames. Many wear flowers in their hair, and for head gear broad, low hats of pandanus leaf, trimmed with tasteful ribbons of banana fiber, in tinting which delicate fabric they excel. Thus we landed on the shores of Kusaie.

* * * * * * *

FEDERAL MOVEMENT IN AUSTRALASIA.

Consul Bell writes from Sydney, under date of April 16, 1898:

Since the public affairs of a country with which the United States has an important and growing trade can not fail to be of interest to our people, I submit the following report on the federal movement by the Australasian colonies:

Before the first meeting of the constitutional convention at Adelaide, South Australia, the federal sentiment in New South Wales, Victoria, South Australia, Western Australia, and Tasmania was well-nigh unanimous. Since the publication of the draft bill, however, the people have divided on the question, and a vigorous campaign is being carried on. The opposition claims not to oppose federation, but to oppose it under the present bill. In view of the growing sentiment in favor of preferential duties in the interests of British products, I see few commercial advantages to our country in the federal movement.

With the present intense loyalty of Australians to British aspirations, the severe competition British manufacturers begin to feel in all parts of the world, and the cry for a consolidated Empire, there is little doubt that a federal parliament would adopt a preferential policy in favor of British goods, while such action by local or colonial parliaments is not likely. In order to show the importance to us of such a measure, I will briefly review the trade of New South Wales in 1896:

Description.	Amount.	
Trade with Australasian colonies	£17,934,686	$87,279,149
Trade with other British colonies	1,145,492	5,574,536
Trade with United Kingdom	15,565,998	75,751,929
Total trade with Great Britain and colonies	34,646,176	168,605,615
Total foreign trade	8,925,683	43,436,836
Total trade of New South Wales	43,571,859	212,042,451
Share of the United States therein	3,794,835	18,468,064

A casual study of the above figures will show that a little over 79 per cent of the total trade of the people of New South Wales is with their fellow British subjects, but that the trade proposed to be benefited by the preferential tariff, that with the United Kingdom, is but a little over 35 per cent of the whole. Then, as the total trade of New South Wales with the United States in 1896 was over

42 per cent of the total foreign trade, the hardship to us of the proposed preferential tariff is obvious.*

With federation and a preferential tariff, the intercolonial trade—about 40 per cent of the whole—will, of course, be free; the nearly 40 per cent more from the United Kingdom and other British possessions will be favored, and the other 20 per cent discriminated against. With the present disadvantage of freight charges, etc., a small burden of this kind would ruin our trade in these colonies.

I inclose the full text of the proposed constitution,† and also a brief history of the federal movement, prepared at my request by one of the literary lights of the federal cause, as follows:

SYDNEY, *April 11, 1898.*

G. W. BELL, Esq.,

United States Consul, Sydney.

DEAR SIR: Your complimentary note received, and I hasten to reply.

At intervals during the last forty or fifty years, in several of the colonies and by various public men of eminence, the subject of Australian or Australasian federation has been discussed. The first active step towards federal union was the holding of a convention in Sydney in 1883, in consequence of which in 1885 the British Parliament passed the "imperial enabling act," under which those colonies that passed enabling acts could unite in forming the federal council of Australasia. The act was passed in five colonies, viz, Victoria, Queensland, Tasmania, Western Australia, and Fiji. The legislative powers of the council are of a limited character, and, in consequence of this fact, the mother colony—New South Wales—never joined. The legislation of the federal council has been very meager. The council itself has not met every year, and when it has met, has not always passed even an act.

The first movement towards a real federation was inaugurated by the late Sir Henry Parkes, through whose influence a preliminary Australasian convention was held in 1890 at the Parliament House, Melbourne. It was attended by two representatives from each of the seven colonies, except Western Australia, which had one representative.

The following resolutions were carried:

"First. That in the opinion of this conference the best interests and the present and future prosperity of the Australasian colonies will be promoted by an early union under the Crown, and, while fully recognizing the valuable services of the members of the convention of 1883 in founding the federal council, it declares its opinion that the seven years which have since elapsed have developed the national life of Australia in population, in wealth, in the discovery of resources, and in self-governing capacity to that extent which justifies the higher act, at all times contemplated, of the union of these colonies under one legislative and executive government, in principles just to the several colonies.

"Second. That to the union of the Australasian colonies contemplated by the foregoing resolution the remoter Australasian colonies shall be entitled to admission at such times and on such conditions as may be hereafter agreed upon.

---

*I do not desire to conceal the fact that for 1896–97 our total trade with New South Wales was abnormal, as large shipments of coin were made to the United States and large shipments of wheat and flour from the United States to this colony, on account of the drought; yet, as our actual trade in various lines of manufactures has increased over 66 per cent since 1894, the importance of the trade has hardly been overestimated.

†Filed for reference in the Bureau of Foreign Commerce, Department of State.

"Third. That the members of the conference shall take such steps as may be necessary to induce the legislatures of their respective colonies to appoint during the year delegates to a national Australasian convention, empowered to consider and report upon an adequate scheme for a federal constitution.

"Fourth. That the convention should consist of not more than seven members from each of the self-governing colonies, and not more than four members from each of the Crown colonies."

In accordance with these resolutions, the national Australasian convention met at the Parliament House, Sydney, in March, 1891. It was attended by seven representatives from each of the following colonies, viz: New South Wales, Queensland, South Australia, Tasmania, Victoria, and Western Australia; and three representatives from New Zealand.

Resolutions were agreed to, the chief points of which were: (1) The preservation of the powers, privileges, and territorial rights of each colony; (2) freedom of trade and intercourse between the colonies; and (3) naval and military defense under one command.

The convention sat for about six weeks, and the draft of a constitution was finally agreed to, to be submitted to the various colonial parliaments. Before further steps were taken, however, Sir Henry Parkes, the premier of New South Wales, was defeated, and he retired from active politics.

In 1895 a conference of the Australasian premiers was held at Hobart, the capital of Tasmania. On the motion of the Hon. George H. Reid, the premier of New South Wales, it was unanimously agreed "that this conference regards federation as the great and pressing question of Australasian politics." A discussion as to the procedure to be followed to secure the forming and adoption of a federal constitution resulted in the following resolutions being carried:

"That a convention consisting of ten representatives of each colony, directly chosen by the electors, be charged with the duty of framing a federal constitution.

"That the constitution so framed be submitted to the electors for acceptance or rejection by a direct vote.

"That such constitution, if accepted by the electors of three or more colonies, be transmitted to the Queen by an address from the parliaments of those colonies, praying for the necessary legislative enactment."

At the request of the conference, the premiers of Victoria and South Australia drafted an enabling bill, which, after amendment, was accepted as a fit measure for the colonial parliaments to adopt, with a view to securing the votes of the electors.

In 1896 the legislatures of New South Wales, Victoria, South Australia, Tasmania, and Western Australia each passed an enabling act, and in Queensland the bill was lost through a contest between the two houses.

What was known as the "People's Federal Convention of Bathurst," in 1896, proved to be an important gathering. Delegates to the number of more than a hundred attended, and the debates that took place and extended over some days gave evidence of much popular enthusiasm on behalf of federation.

In accordance with the enabling acts, the election of delegates in each of the five assenting colonies took place on March 4, 1897. The election created much excitement. The number of candidates was forty-nine in New South Wales, thirty-nine in Victoria, thirty-three in South Australia, thirty-two in Tasmania, and seventeen in Western Australia. The polling proved to be very heavy.

The convention thus elected opened in Adelaide on March 22, 1897. The Hon. C. C. Kingston, premier of South Australia, was elected president and the Hon. Edmund Barton, M. L. C., of New South Wales, was elected leader. The Adelaide session continued till May 5. The discussion was resumed in Sydney on September 2, and after several weeks' debate was further adjourned for a final session in

Melbourne, which opened on January 20 of this year and terminated on March 17. During these three sessions the various clauses of the constitution were debated with much vigor, and many speeches of a brilliant character were delivered. When the Melbourne session ended, the constitution bill was completed.

In the first week of June the electors of each colony have to vote for or against the acceptance of federation on the conditions of the bill. It is impossible to predict the result, but the federal feeling appears to be growing. A severe political contest is certain. The supporters and the opponents of federation are marshaling their forces and both profess to be certain of victory.

I am, yours,

E. PULLSFORD.

Under date of June 6, Consul Bell adds:

On June 3 the people of New South Wales, Victoria, Tasmania, and South Australia voted on the proposed constitution bill for the federation of the colonies, and New South Wales defeated the bill, the 80,000 minimum vote in its favor not being reached.

The votes in the various colonies were:

Colony.	For.	Against.
New South Wales	70,996	65,619
Victoria	98,998	21,864
Tasmania	10,719	2,532
South Australia	25,774	13,846

The official count has not been completed, but it is believed that few changes will be made from the figures given above. Western Australia postponed her election, with the purpose of voting only in case the other colonies carried the bill.

The number of votes registered in New South Wales is 293,000, from which it will be seen that less than half of the voters of the country expressed an interest in the question at issue.

In my opinion, the federal movement as applied to the colonies above mentioned is dead for many years to come, and with it has disappeared the danger of a policy of preferential duties. There will doubtless be an effort to federate the three eastern colonies—Victoria, New South Wales, and Queensland—between which the financial differences are less than between the parties to the last struggle; but the consummation of this scheme may be far distant.

Although this result may be unfortunate for the people here, the business interests of the United States can now expand uninterruptedly along the lines of their former triumphs. The fiscal policies in this country are well settled, and in no quarter are our trade interests more secure from fluctuations or legislative interference.

HINDRANCES TO AMERICAN OIL TRADE IN CHINA.

A few suggestions as to the protection of trade in American oil in China are respectfully submitted, for the benefit of our industries.

The recent discovery of petroleum in the very heart of China, in the rich and populous province of Szechuan, is reported by the Tientsin correspondent of the Hongkong Telegraph as follows:

> Very rich petroleum wells have been found near Chungking, which suggest endless possibilities in this line alone. These oil wells are said to be far superior to those discovered in Kyao-chau, and more important than any yet worked by native methods; but they need foreign capital and management, with which, it is thought, they will yield colossal quantities of oil. Of course, what would be required to place the product on a sound commercial basis would be a big oil refinery.

This discovery is very important, and, in view of the oil wells in the Japanese island of Formosa, and of other oil wells near the German possession of Kyao-chau, in the province of Shantung, our trade in American kerosene is bound to be affected unless prompt efforts are made to control the output and, if possible, the trade in the Chinese product.

We have already in this growing district of Canton—which has over three times the area and population it had in 1896, and which comprises the three provinces of Kwangtung, Kwangsi, and Yunan, with more than 80,000,000 of people—two powerful competitors in Russian and Dutch oils, as will be seen by the customs statistics of the trade at Canton. Until 1896, Dutch oil was unknown in China. It comes from Sumatra, and the Royal Dutch Petroleum Company is vigorously pushing it in Hongkong and Chinese coast ports, including the seven treaty ports in this consular district, viz, Swatow, Macao, Hoihow, Pakhoi, Canton, Samshui, and Wuchow. The inland waters of China were opened to the trade of all nations on June 1, 1898, and this extension of markets will afford greater facilities for increasing our commerce in China.

In 1896, the German agents for the Dutch oil purchased a site in Hongkong, built a pier for the use of tank steamers, and constructed several large reservoirs to store oil in bulk, as well as warehouses for canning and boxing the same. Our Dutch rivals in kerosene began to develop their enterprise with characteristic energy, and in 1897, after just one year, had such a demand that it was necessary to run several tank steamers between Sumatra and Hongkong to supply the constantly increasing market in China for cheap oil.

Previous to the erection of these tanks by the Royal Dutch Petroleum Company, oil was imported in cases of two cans each.

In these oil works in Hongkong, there were canned in 1897 upwards of 2,600,000 gallons of oil for the Canton market alone. Customs returns show 2,025,780 gallons of American oil imported into Canton between January, 1894, and January, 1897. Of Russian oil there were imported during the same period 2,703,320 gallons.

The Dutch oil is an inferior article, and much cheaper, of course, than that from America. It is well known that large quantities of Dutch oil are being palmed off on the unsuspecting Chinese as genuine American kerosene. It is canned in Hongkong in old American tins that are bought throughout China for that purpose at 10 cents a tin and are marked with popular American trade-marks of various kinds. The Chinaman is a practical business man, and if he can buy Dutch or Russian oil, or, as is frequently the case, a combination of both these smoky, inflammable, and dangerous oils, made up in a way that will enable him to sell it in China as American "Brilliant," "Comet," "Sunlight," or other popular brands, and at a lower price than the genuine article, he will, of course, jump at the opportunity. At Wuchow (opened to trade in June, 1897), British, German, and other agencies were soon established, and beside "pushing" piece goods, thread, cheap lamps, matches, etc., they introduced Russian and Dutch oil into the innumerable cities, towns, and villages on the great West River and its various branches, where our oil had held the market until last year.

The whole of the great West River and all the inland waters of China are now open to the navigation and the trade of all nations. American exporting firms can establish agencies in the great trade centers of this vast district, which has more than 1,000 miles of seacoast, including the large Island of Hainan, and which extends into the interior as far as Thibet, a distance of over 2,000 miles. This territory is larger in area and in population than that of Austria, Germany, France, and Spain combined, and probably will be as important to United States trade.

The United States is fully able to supply the demands of this great market, and vigorous efforts should be made to do so. We have active and determined competitors in the field. For many years our oil producers supplied China's millions. We can now send our oil hundreds of miles into the interior under the American flag. We should hasten to avail ourselves of this opportunity. With increased competition should come increased effort.

American trade with the Far East in recent years has not, in certain lines, increased as rapidly as has that of other countries. In

no branch of commerce is this more evident than in oil. In 1894, imports into Shanghai in this line were:

	Gallons.
American oil	36,241,924
Russian oil	4,059,700
Dutch oil	Nil.

In 1897, our oil remained about the same, while Russian oil rose to over 20,000,000 gallons, and Dutch oil, of which there were no exports in 1894, rose to 1,581,000 gallons in 1896 and to 5,570,400 gallons in 1897.

Notwithstanding the great increase in the demand in China during the past four years, we have not received our share of the oil trade.

The Dutch product has advantages in freight and difference in exchange. The points whence American oil is shipped to the Far East are thousands of miles away. Would it not be advisable to select some point on the Pacific coast for the export of oil to China? We could ship oil in tank steamers across the Pacific to the Chinese markets quicker and cheaper than is possible by sailing ships as at present. The old methods were good when we monopolized the market; now, however, we must find better ones.

EDWARD BEDLOE,

CANTON, *June 3, 1898.* *Consul.*

RAILWAY SUPPLIES FOR CHINA.

Consul-General Goodnow writes from Shanghai, under date of June 18, 1898:

Eight "Mogul" freight engines have just arrived and are being erected at Tongku for the Northern Railways of China, and Chief Engineer Kinder has to-day ordered four lighter engines for switching purposes. All these are from the Rogers Locomotive Company, of Paterson, N. J.

I inclose herewith report of tenders just received for 7,000 tons steel rails and accessories, all to be delivered at Tongku.

The appended clipping, which Mr. Goodnow sends with his report, gives the names of the bidders and their price per ton for rails, fish plates, bolts, and spikes.

On May 4 the consul-general forwarded a report* giving the

* See CONSULAR REPORTS No. 215 (August, 1898), p. 587.

names of bidders and the gross amount of their proposals. The present inclosure gives the bids more in detail, as follows:

Name of bidder.	Rails.	Fish plates.	Bolts.	Spikes.
	Per ton.	*Per ton.*	*Per ton.*	*Per ton.*
Jardine, Matheson & Co.	$31.37	$39.10	$78.80	$75.03
William Forbes & Co.	31.68	40.06	65.87	59.42
George Turner	31.68	33.76	76.72	73.26
Louis Spitzel & Co.	32.17	45.34	57.32	57.32
Birch & Co	32.26	40.00	76.13	72.91
William Forbes & Co.*	32.70	41.10	66.90	60.45
Vander Stegen & Co.	32.57	45.34	59.65	55.56
Carlowitz & Co.	33.46	41.58	78.90	75.63
William Forbes & Co.*	33.54	41.93	81.30	77.42
Buchheister & Co.	33.66	42.24	80.52	77.22
Mitsui Bussan Kaisha	33.69	41.84	80.12	75.40
Tientsin Trading Company	34.24	42.64	79.96	76.46
Mandl & Co	38.11	49.76	71.57	68.17
A. S. Fobes & Co.	29.20	43.80	65.70	58.40

* Materials from different makers.

Under date of May 14, Consul-General Goodnow says that the bid of A. S. Fobes & Co. had been accepted.

THE PORT OF WOOSUNG.

The village of Woosung lies at the junction of the Huangpu and Yangtze rivers, about 14 miles from the mouth of the Yangtze. Under the customs regulations, the port of Shanghai was extended to the mouth of the Huangpu, and anchorage limits were established at Woosung, where ships could unload sufficient cargo into lighters to allow the ship to cross the bar at Woosung and to come to the usual place of unloading opposite the business section of this city. No goods have been allowed to be landed at Woosung, and the lighters used were bonded to the customs.

The bar across the Huangpu (or Whangpoo) River was made shallower at the time of the Franco-Chinese war by stone boats sunk there by the Chinese authorities, but since that time has been gradually deepening from natural causes. In 1895, at high tide, there were from 18 to 20 feet of water on this bar. At the present time, there are from 23 to 25 feet. But the channel of the river between Woosung and Shanghai has not improved; it has rather deteriorated. The larger mail steamers and men-of-war do not attempt to come up to Shanghai, but transfer their passengers and freight for this port to tugs and lighters at Woosung.

About a year and a half ago, the imperial Chinese railway administration began the construction of a standard-gauge railway from Woosung to Shanghai. The construction has been very slow, but the promise is now made that trains will run during the coming fall. During April of this year, the Imperial Government announced that Woosung had been opened as a treaty port, and that as soon as possible a branch custom-house would be opened, "so that when the Woosung and Shanghai Railway is finished goods may be transmitted by rail, which will prove an additional convenience to trade."

The opening of this new port and the completion of this railway seem to be of the greatest significance to Shanghai. The fact that the contract for the railway from Woosung to Shanghai and thence via Soochow to Nankin and Hankau has been let to Jardine, Matheson & Co. insures its completion in the shortest possible time, and its proper management when completed. While the firm is English, I believe that Americans will have a fair opportunity to compete for furnishing materials, etc.

Under the stimulus of the opening of the port and the certainty of the construction of the railway, real estate, not only at Woosung but in all the region between Shanghai and Woosung, has greatly increased in value. The shipping companies have obtained water frontage at Woosung, and plans are being made for docks and warehouses at the new port.

The site of the village of Woosung is comparatively high, some parts being 15 feet above high tide, thus securing drainage. The anchorage on the Yangtze River side is not good, as the shallows extend a long way from the shore. On the side of the Huangpu River, while the deep water comes to the shore at the site of the village, the anchorage is narrow, and not many ships can find place at the docks. But apparently there is room for the large boats, which can not pass the bar without lightering all or part of their cargo.

The danger to the new port lies in the fact that much of the land has gotten into the hands of speculators, who are anticipating the probable rise in price. I send a map showing the location of the new port.*

JOHN GOODNOW,
Consul-General.

SHANGHAI, *May 31, 1898.*

* Filed for reference in the Bureau of Foreign Commerce, Department of State.

NEW TRADE REGULATIONS ON THE YANGTZE.

Minister Denby sends from Pekin, under date of May 18, 1898, copy of the revised regulations of trade on the Yangtze River, which will take effect after they have received the approval of the foreign representatives at Pekin. The inclosure reads:

YANGTZE REGULATIONS.

ARTICLE 1. The revised regulations of trade on the Yangtze-Kiang (1862) having been amended and the substance of their provisions having been incorporated in the present Yangtze regulations, the said revised regulations of trade on the Yangtze-Kiang are hereby abrogated, together with the port and customs regulations thereon dependent.

ART. 2. The merchant vessels of the treaty powers are authorized to trade on the Yangtze-Kiang at the following treaty ports: Chinkiang, Nankin, Wuhu, Kiukiang, Hankau, Shasi, Ichang, and Chungking; and to land and ship goods in accordance with special regulations at the following nontreaty ports: Tatung and Ngan-King, in Ngan-hui; Hukow, in Kiangsi; Luchikow and Wusueh, in Hu-Kwang. Shipment or discharge of cargo at any other ports on the river is prohibited, and any violation of the prohibition will be dealt with in accordance with the treaty provisions applicable to clandestine trade along the coast; but passengers and their baggage may be landed and shipped at any of the regular passenger stations (at present consisting of Kiangyin and Ichiṅg, in Liang-Kiang; Hwangtsze Kang and Huang Chow, in Hu-Kwang). Passengers' baggage must not contain articles subject to duty, and the presence of dutiable articles will render the whole liable to confiscation.

ART. 3. Merchant vessels trading on the river are to be divided into three classes—

First class: Seagoing vessels trading for the voyage up river beyond Chinkiang.

Second class: Steamers running regularly between any of the river ports or between Shanghai and any river port.

Third class: Lorchas, papichos, junks, etc.

These three classes of vessels will be dealt with according to treaty and the rules for the various ports.

ART. 4. *Seagoing vessels.*—Seagoing vessels trading no further up river than Chinkiang will be dealt with at Chinkiang in every respect like vessels trading at other coast ports, but seagoing vessels on a voyage further up river than Chinkiang become thereby vessels trading on the river of the first class, set forth in the preceding article; such merchantmen, whether steamers or sailing vessels, must deposit their registers with the consul, or, if there is no consular representative, with the custom-houses at Shanghai, Woosung, or Chinkiang, which, on receipt of a consular application or on deposit of papers, will issue a certificate to the vessel, to be called a "special river pass," on which shall be entered the vessel's name, flag, registered tonnage, general cargo, and armament. The vessel may then proceed up river; and at whatever treaty ports she trades must report and clear, load and unload cargo, and pay dues and duties in the same manner as at other treaty ports along the coast. On return to the port that issued it—Chinkiang, Woosung, or Shanghai—the "special river pass" is to be surrendered to the customs, which, having ascertained that all dues and duties have been paid and all other conditions satisfied, will grant the clearance to enable the vessel to proceed to sea.

ART. 5. *River steamers.*—Any steamer intended to trade regularly on the river may deposit her register at the consulate at Shanghai, or, if without consular representative, at the custom-house, when the customs, on receipt of a consular application or on deposit of the register, will issue a certificate on which shall be entered the vessel's name, flag, registered tonnage, and armament, to be called a "river pass," that shall be valid during the current year; such pass must be renewed every year, either at Shanghai or at Hankau or Ichang in the case of river steamers trading above those places and not returning to Shanghai.

River-pass steamers will report and clear, load and discharge, and pay dues and duties in accordance with the customs regulations of the port concerned; their tonnage dues are to be paid at the ports which issue or renew the river pass (Shanghai, Hankau, or Ichang).

Infringement of river port regulations will be punished by the infliction of the penalties in force at the other treaty ports; for a second offense the river pass may be canceled and the steamer refused permission to trade thenceforward above Chinkiang.

Any steamer not provided with a river pass, if proceeding above Chinkiang, will come under the rule affecting seagoing vessels laid down in article 4, and will be treated accordingly.

ART. 6. *Cargo of river-pass steamers.*—The former regulations, which made it obligatory to deposit coast-trade duties simultaneously with paying export duties, having been abrogated, river-pass steamers will now pay duties in the same way as vessels at other treaty ports along the coast, that is, export duties at the port of departure before shipment of exports, and import or coast-trade duties at the port of discharge before release of imports; and similarly they will ship, transship, and discharge cargo after examination and issue of permit in the same way as vessels at treaty ports along the coast.

When tea is landed by a river-pass steamer, the consignee, instead of paying coast-trade duty, may deposit a bond for the amount; on proof of reshipment within a year the bond will be canceled. When reshipped tea is relanded at another port—*e. g.*, reshipped at Hankau and relanded at Shanghai—a new bond will be required in lieu of coast-trade duty, to be canceled on reshipment, and so on.

ART. 7. *Small craft* (*lorchas, papichos, junks, etc.*):

(*a*) Lorchas, etc., owned by foreigners, if provided with registers and entitled to fly national flags, are required to take out a special river pass, either through the consulate or from the customs direct at Chinkiang, if proceeding further up the river. They will report, work cargo, and pay duties like other seagoing special river-pass vessels.

(*b*) Papichos, etc., owned by foreigners, but not provided with registers or entitled to fly national flags, are to take out customs registers at the port they belong to and report, work cargo, and pay duties in the same way as lorchas, etc.

(*c*) Chinese junks chartered by foreigners are available only for conveying foreign-owned cargo from treaty ports to treaty ports; they must take out special junk papers at the customs, to be obtained in exchange for bonds executed at, and deposited with, the customs, the condition of the bond being that the cargoes are bona fide foreign property and will be landed and pay duty at a treaty port, the penalty being that if the cargoes fail to be so landed and pay duty, no chartered junk will thereafter be cleared for the foreigner in question. Such junks are to report, work cargo, and pay duties in the same way as lorchas and papichos.

ART. 8. *Cargo certificates.*—Special river-pass merchantmen, river-pass steamers, and lorchas, papichos, junks, etc., must apply to the customs at the port of departure for a cargo certificate (tsung tan), which, on the vessel's arrival at the port of destination, must be handed to the customs before permission to discharge can

be given. The vessel will be responsible for the duties on all goods entered on the said cargo certificate and not landed on permit at the port of discharge.

ART. 9. *Miscellaneous.*—Any trading vessel falling in with a revenue cruiser or customs boat on the Yangtze-Kiang is to produce her papers for inspection, if examination of them is required. Vessels unprovided with proper papers will be dealt with under the treaty articles penalizing clandestine trade along the coast. The customs may seal the hatches of any vessel trading on the Yangtze-Kiang, and may place a customs officer on board to accompany her on the trip, whether up stream or down. Special river-pass vessels of the first class are not required to anchor to exhibit their papers at the intermediate ports passed and not traded at.

ART. 10. *Yangtze customs and port regulations.*—The adoption and promulgation of new regulations for vessels trading on the Yangtze having rendered meaningless sundry customs and port regulations which guided procedure under the former system, and having necessitated the substitution of fresh regulations and different practice under the system now introduced, the ports concerned (Shanghai, Chinkiang, Nankin, Wuhu, Kiukiang, Hankau, Shasi, Ichang, and Chungking) will proceed forthwith to arrange and publish new rules and regulations; and these are meant, on the one hand, to facilitate trade, and, on the other, to protect revenue and prevent smuggling.

The above regulations are open to revision when and if necessary.

COTTON AND COTTON GOODS IN JAPAN.

Consul Lyon sends from Hiogo, under date of May 17, 1898, a statement of the imports of raw cotton into Japan, and also a separate table of imports in this line into Hiogo, both for 1897, as follows:

Imports into Japan.

From—	Quantity.	Value.
	Pounds.	*Yen.*
British India	180,053,500	25,720,188.53
China	65,482,930	9,527,819.21
United States of America	46,364,897	7,273,221.69
Anam and other French Indian possessions	2,191,200	331,349.55
Other countries	1,280,050	269,684.64
Total	295,372,577	43,122,263.62
		$21,444,887.00

Imports at Hiogo (Kobé).

From—	Quantity.	Value.
	Pounds.	*Yen.*
United States of America	41,162,639	6,475,922.65
China	39,524,769	5,890,839.82
British India	154,992,631	22,090,626.26
French India	2,131,566	322,643.65
Other countries	1,280,051	269,684.64
Total	239,091,656	35,049,717.02
		$17,454,760.00

The principal importers of raw cotton in Osaka and Kobé, according to Mr. Lyon, are: Frazar & Co. (American firm), Kobé; China and Japan Trading Company (American firm), Kobé; H. Lucas & Co. (British firm), Kobé; H. Ahrens & Co. (German firm), Kobé; Mitsui Bussau Kaisha (Japanese firm), Osaka and Kobé; the Japan Trading Company (Japanese firm), Osaka.

Consul Harris, of Nagasaki, under date of April 25, 1898, sends the following table of imports of cotton goods into Japan in 1897:

Class.	Quantity imported.	From—				
		Great Britain.	United States.	Germany.	Switzerland.	Other countries.
Cotton yarn.....pounds...	21,454,936	21,311,489	.....	.....	.....	143,447
Cotton thread.....do.....	367,533	364,333	.....	2,999	.....	201
Chintz or printed cotton, yards.....	9,252,465	9,209,897	.....	.....	.....	42,568
Cotton damask.....yards...	1,865	510	.....	1,355	.....	.....
Cotton drills.....do.....	3,101,178	3,096,557	4,502	.....	.....	119
Cotton duck.....do.....	364,536	4,644	357,946	1,946	.....	.....
Cotton satins.....do.....	9,182,824	9,133,411	.....	29,009	20,115	289
Exceeding 40 inches, yards.....	280,373	272,256	.....	7,935	.....	182
Cotton velvets.....yards...	2,678,114	2,626,591	.....	51,523	.....	.....
Ginghams .....do.....	7,906	7,906	.....	.....	.....	.....
Shirtings:						
Gray.....do.....	50,750,636	50,680,163	70,278	.....	.....	195
White.....do.....	2,431,576	2,406,517	24,432	433	.....	194
Figured.....do.....	162,736	162,427	.....	90	.....	219
Twilled.....do.....	640,902	637,797	3,105	.....	.....	.....
Dyed .....do.....	1,260,307	1,212,321	.....	12,000	35,986	.....
Taffachelas.....do.....	54,427	35,246	.....	5,981	13,200	.....
T cloths .....do.....	948,654	948,654	.....	.....	.....	.....
Turkey reds .....do.....	5,261,477	5,080,727	.....	.....	179,750	30
Victoria lawns.....do.....	2,021,231	2,021,231	.....	.....	.....	.....
Cotton handkerchiefs, dozen.....	321,754	305,224	.....	6,788	8,675	1,067
Satin, silk, and cotton mixed.....yards...	213,721	54,503	.....	56,935	25,273	77,010
All other cotton goods, yards.....	2,308,491	1,673,126	4,045	541,441	9,317	80,762

OPENING OF PORTS IN KOREA.

The Korean Government has announced its intention to shortly open four new ports to foreign trade. The proposed ports are as follows: Sung-chin, on the northeast coast near the Russian frontier and in the province of Ham Kyung; Kuhn-san, in the North Culla Province, on the southwest coast, about midway between Chemulpo and Mokpo; Masampo, in the South Kyung Sang Province, on the south coast, near to Fusan; and the northern capital, Peng-yang. The conditions have not yet been determined and the date for opening these ports has not been announced. They will probably be

subject to the same municipal regulations as those drawn up for the recently opened ports Mokpo and Chenampo (see CONSULAR REPORTS No. 209, February, 1898, p. 228).

This action will give Korea ten open ports, namely, Seoul, Chemulpo, Fusan, Genaan, Peng-yang, Sung-chin, Kuhn-san, and Masampo.

It is also announced that 900,000 square meters (222 acres) will be allotted on Deer Island, in Fusan Harbor, for a general foreign settlement for Fusan. The Japanese have maintained a large and thriving city at Fusan for over two hundred years, but the settlement for foreigners has never been definitely laid out. Owing to the rugged character of the mainland and the fact that the only available sites were long ago taken by the Japanese, the low-lying end of Deer Island, a few hundred yards distant from the Japanese town, offered the only suitable site for a foreign settlement.

The proposed Russian coaling station on Deer Island, of which there has been much said in the newspapers of late, is included in the site for the new settlement. It is understood, however, that this is in accordance with the wishes of the Russian officials.

There is a small colony of Americans resident at Fusan. It is thought that the opening of the new port Masampo, only 30 to 50 miles distant from Fusan, will do the trade of the latter much injury, as Masampo is said to possess a better harbor and is on a river which gives it good communication with the interior. Fusan, on the contrary, has no such river communication, and is further hemmed in by rough hills and mountains.

HORACE N. ALLEN,
Consul-General.

SEOUL, *June 3, 1898.*

COTTON PIECE-GOODS TRADE AT CALCUTTA.

In continuation of my report on cotton goods in British India, dated March 30, 1898,* I inclose the report of the Bengal Chamber of Commerce on cotton piece goods and yarn passed at the custom-house for the months January to April, 1898, which shows the magnitude of the trade at Calcutta.

In the report above referred to, I said that the United Kingdom controls about 99 per cent of this trade; but now that there is a direct line of steamships between Calcutta and New York, saving time as well as the cost of transshipping the goods, there is no good reason why our manufacturers should not compete for this trade and secure a good share of it.

---

* See CONSULAR REPORTS No. 214 (July, 1898), p. 379.

The few American brands of cotton goods that have been introduced here stand well in the market, being made from superior cotton, and it would be easy to enlarge the trade by proper effort.

Imports of piece goods and yarns passed at the custom-house for the months January to April, 1898.

Month.	Gray goods.	White goods.	Colored, printed, or dyed goods.	Yarns (gray and white).	Turkey red and dyed yarns.
	Pieces.	*Pieces.*	*Pieces.*	*Pounds.*	*Pounds.*
January	6,510,717	1,647,409	325,561	2,925,652	790,497
February	6,282,087	1,664,340	290,823	1,641,841	595,427
March	8,002,345	1,979,532	533,374	2,578,133	558,517
April	9,116,449	1,392,057	492,259	1,137,600	462,752
Total	29,911,598	6,683,338	1,642,017	8,283,226	2,407,193
Total for same period in 1897	31,563,152	5,001,963	1,032,750	5,346,279	1,738,997

R. F. PATTERSON,
Consul-General.

CALCUTTA, *June 7, 1898.*

THE EUROPEAN SUGAR QUESTION.

At this time, while the International Sugar Conference is in session, it seems apropos to briefly direct attention to the present situation.

The object of all continental beet-sugar-producing countries has been, until the present, to increase by all possible means the volume of production. In 1855 the output of beet-root sugar amounted to 210,000 tons; in 1895, to 4,793,000 tons, an increase of 2,185 per cent. During the same period the production of cane sugar increased only 154 per cent. It not being possible to consume such quantities of sugar in the countries of production, export bounties were established in 1861. The result was a tremendous increase in trade and the gradual elimination of cane sugar from the British and American markets. In England the proportion of beet-root sugar to the total of sugar imported from 1861 to 1894 rose from 6 per cent to 76.8 per cent. In quantity these results were magnificent, but great sacrifices have been made to attain these results. While increasing their bounties, all nations recognize that the system is ruinous; hence their desire to end the present situation. One, however, can not act without all. Under the menace of competition, the drawbacks have regularly increased. Lately it has been a race to decide which nation could, by high drawbacks, drive its competitors out of foreign markets. In 1896, Germany and Austria doubled the rate

of their bounties. France soon afterwards increased her scale, and last year the German Reichstag was discussing another advance. The present bounties paid per ton are: Germany, $6.03 to $8.44; Austria, $7.24 to $10.86; Belgium, $7.90 to $11.39; France, $21.71.

All the producing nations suffer from this system. The taxpayer pays more and more, not for the privilege of consuming this product, but rather to enable others—foreigners—to buy it cheaper. The anomaly thus arises that sugar sells in England for 40 per cent of its price in Belgium. If all the governments had bounties as high as those of France, the English consumer would pay only 15 per cent of the price on the Continent. Mr. Chamberlain, indeed, has declared that the French, German, Belgian, Austrian, and Dutch taxpayers were paying British purchasers an annual tribute of $10,000,000.

But, while England is enriching itself, the British colonies are suffering. The planters wish to abandon the cultivation of sugar cane; they declare that they will be obliged to quit it altogether if there is not a radical change in the situation before long. Exports of sugar represent 75 per cent of the entire export trade of the British West Indies. England, therefore, participates in this conference.

The essential object of the conference is the elaboration of a plan for the abolition of sugar bounties, but auxiliary questions will also be discussed. However important the success of such a conference may be for continental Europe, it would be an error to assume that the final solution of the difficulties involved will be found. Nothing is less certain. In fact, this conference is not the first of its kind; it is the eighth, and seven have failed in the main. Another factor not heretofore existing is presented to the consideration of this congress. The United States, consuming 2,500,000 tons (a third of the world's production) and producing only 300,000 tons, inflicts by its new tariff law a compensatory duty on sugar imported equivalent to the amount of export bounty paid by the country of origin. This duty thus destroys the effect of the bounty, so far as our country is concerned, and annihilates any advantage which the European producer may have formerly gained through the action of his own government. Continental Europe thus sees our great market suddenly closed, while it remains open to the manufacturers of cane sugar. The British colonies thus have an immense advantage, and the chief interest of England in the conference disappears. The mother country continues to profit by the action of continental countries, and the colonies see in our market an equal chance for competition. France heretofore has energetically opposed the abolition of the bounties. Thus the situation is at present.

Possibly the delegates to the Brussels conference will have better success than their predecessors; but they are endeavoring to solve one of the most difficult of economic questions.

HENRY C. MORRIS,
Consul.

GHENT, *June 21, 1898.*

THE ENGLISH CHEMICAL TRADE.

This consular district (Liverpool) is the largest chemical center in the world, and the United States has been the best customer. Conditions, however, are rapidly changing. There is a revolution going on in the method of manufacture. Within recent years, the English chemical trade has been meeting with great competition from the Continent, especially from Germany. A still more recent and more significant feature of the chemical trade of this district is the falling off in the exportations to the United States—indeed, no other manufacture, with the exception of tin plate, shows such a great decline in exportations to the United States. The following table gives the values of the exportations of chemicals from the Liverpool district to the United States for the calendar years named:

1891	$8,695,822
1892	8,692,731
1893	7,226,636
1894	5,865,238
1895	6,075,305
1896	4,357,287
1897	3,893,667

During the six months of 1898 ending June 30, the exportations were $1,181,529.

The English manufacturers of chemicals freely concede that the principal reason of this decline of exportation to the United States is owing to the recently established American home industry. At a general meeting of one of the largest concerns in this district (Brunner, Mond & Co.), the president, Sir John Brunner, M. P., referring to the fact that the dividend on the ordinary capital had decreased from 30 to 25 per cent, as compared with last year, said that the shareholders "were all aware that the company had suffered a very severe loss in their American trade through the operation of the Dingley tariff."

The chemical trade is intimately connected with the salt industry, as salt is by far the most important of the raw materials in the manufacture of chemicals. The county of Chester, within this consular district and immediately south of the River Mersey, produces more

salt brine than any other territory in Great Britain, and this fact accounts for the establishment of the chemical industry here. In a statistical circular letter upon the Cheshire salt industry, published by a local authority at the commencement of the year, it was stated:

> In 1887 Liverpool sent to the United States of America 169,195 tons of salt; in the year just expired (1897) the total amounted to only 91,723 tons—a terrible decline. It is at all times difficult for England to compete with the salt works of America on their own continent, and this difficulty is turned almost into an impossibility by the fact that the Government of the United States, in the year just concluded, placed upon common salt a duty amounting to 150 per cent of its cost at the works in Cheshire.

The greater portion of the salt exported to the United States goes over in bags as ballast. The duty under the present tariff act is $1.25 a ton on salt cake, 8 cents per 100 pounds on salt in bulk, and 12 cents per 100 pounds on salt in packages. Under the tariff law of 1894, salt cake and salt in bulk and in bags, barrels, etc., were free, but the bags or other packages paid the same rate of duty as if imported separately.

For some years, there has been an active rivalry in the production of chemicals from salt by two methods—the Leblanc process and the ammonia-soda process. The first stage of the Leblanc process is the decomposition of common salt by the agency of sulphuric acid. In this process there is great waste, and until recently it was very objectionable on sanitary grounds. About forty years ago, the by-product hydrochloric acid was utilized for the manufacture of bleaching powder, the processes for which have been greatly improved upon within the past twenty years. Some years afterwards, the ammonia-soda process was established on a commercial footing in this and other countries. The new process was made financially successful by the establishment of works in Brussels, and by Messrs. Brunner, Mond & Co., at Northwich, Cheshire—33 miles from Liverpool. As carried on by Messrs. Brunner, Mond & Co., the ammonia-soda process has long yielded the principal article required, at a saving of cost so considerable as compared with the Leblanc process that if the manufacturing exponents of the latter had been confined to the production of soda, they would before now have been driven from the field. It is the utilization of their by-product, hydrochloric acid, for the manufacture of chlorine products—including not only bleaching powder, but chlorate of potash (used for making matches and percussion caps) and chlorate of soda—which has been their mainstay, to such an extent that it is, commercially, quite true to say that in the Leblanc soda industry at the present time, soda is a by-product of the manufacture of chlorine products. The utilization of other by-products has been of great service to the Leblanc

manufacturer in his fight with the ammonia-soda process. Every constituent of every substance employed at every stage is, if not altogether, yet to a very large extent, used in a way to have a market value. Yet, not a few of the houses engaged in the Leblanc process found their profits reduced so much that they dropped out of business.

About the end of 1890, there was a combination of practically all the alkali manufacturers in this country, with the exception of Brunner, Mond & Co. This syndicate is known as the United Alkali Company, Limited, and its headquarters are at Liverpool. It has a capital of nearly $39,000,000. Its principal works are at St. Helens and Widnes, within this consular district, but it also has works at Newcastle, Bristol, and Glasgow. It employs 6,000 persons at the St. Helens and Widnes works, and 3,500 on the Clyde and Tyne. The United Alkali Company until a short time ago produced nearly all its chemicals by the Leblanc process. In order to meet the competition of the ammonia-soda process, the United Alkali Company has been obliged to cut down wages, and reductions have been made in the wasteful escape of gases. Yet, in spite of the savings and improvements, there seems to be no doubt that the production of soda by the Leblanc process must continue to steadily decline. The amount of salt decomposed in England by the Leblanc process declined from 434,298 tons in 1894 to 360,929 tons in 1896, while the amount decomposed by the ammonia-soda process rose from 361,603 tons in 1894 to 431,577 tons in 1896. A short time ago, the United Alkali Company established a plant for carrying on the ammonia-soda process at Widnes and Fleetwood (Lancashire), and its output of ammonia-soda is now between 60,000 and 70,000 tons.

It has been the hope of the English chemical manufacturers to so reduce the cost of production by improvements as to enable them to compete with the American concerns. In order to have a share in the American home trade, the United Alkali Company is now erecting works at Bay City, Mich., and will operate under the name of the North American Chemical Company.

Perhaps the question of greatest interest in connection with this industry is the possibility of producing bleaching powder and other chlorine products cheaper than they can now be produced by the Leblanc process.

It is at this point that the revolution in the chemical trade, spoken of at the commencement of this report, is making itself manifest.

In 1896, an address was delivered by Dr. Ludwig Mond, president of the chemical section of the British association, in which he gave a description of a new method, which, though elaborate, enabled the ammonia-soda process to compete not only in the production of

carbonate of soda, but also in that of bleaching powder, with the Leblanc process. Dr. Mond went on to say that he had hesitated to extend the new method in connection with the ammonia-soda process as rapidly as he would otherwise have done, because of the possibilities involved in the processes lately developed for the production of chlorine by electrolysis.

The electrolytical method for the manufacture of chloride of potash, bleaching powder, and caustic soda for the decomposition of salt, instead of the employment of bi-sulphuric acid, has been in use for some time in Germany, and also to a small extent in the United States. It is claimed, that by the application of electricity, the chemicals can be produced more cheaply than by the old method. The electrolytical methods do certainly produce more direct results, but local experts say that it is yet too soon to definitely decide whether they are more economical than the old method, as there are so many considerations which time alone can solve, such as the wear and tear of machinery and the cost of replacement, which are expected to be serious items of expenditure. Where electricity can be produced by water power, as in Norway and at Niagara and other places in the United States, the new process will have a better chance of success than in England, where it must be produced at great cost in the consumption of coal. The various electrolytical processes in use in this neighborhood are:

(1) Richardson & Holland's patents, which are being worked at Parr (St. Helens), but apparently so far are not proving a commercial success, although over $486,000 have been employed in perfecting them.

(2) Castner-Kellner's patents, worked at Weston Point (Runcorn). The company holds out the promise of being able to make a return of 8 per cent per annum to their shareholders next year. For the last year they were paid nothing.

(3) Hargreaves & Bird's patents, works for which are being erected at Middlewich in Cheshire.

(4) The Rhondin process, for which a prospectus was issued inviting the subscription of capital. This was not allowed to go further, as the Castner-Kellner Company obtained an injunction restraining the Rhondin Company on the ground that their process was an infringement of the Castner-Kellner patents.

Speaking generally, there has been a steady decline in prices at Liverpool, dating from 1893. The following figures show the downward movement:

Sulphate of ammonia.—In 1893, $68.13 per ton; in 1897, $40.14.

Caustic soda.—In 1893, $46.22 per ton; in 1897, $35.88.

Soda ash (Leblanc).—In 1893, $22.50 per ton; in 1897, $21.89.

Chlorate of potash.—In 1893, 16 cents per pound; in 1897, 7.6 cents.

Bleaching powder.—In 1893, $41.36 per ton; in 1897, $30.40.

Muriate of ammonia.—In 1893, $4.86 per cwt.; in 1897, $4.25.

Carbonate of soda.—Prices have slightly fluctuated; in 1893 the price was $19.46 per ton; in 1897, $20.67.

Sal ammoniac.—The price has been very steady from 1893 to 1897, it being about $8.51 per cwt. for first quality and $8.02 for second quality.

JAMES BOYLE,
Consul.

LIVERPOOL, *July 8, 1898.*

SIPHON BOTTLES IN FRANCE.

I have the honor to give herewith such information as I have been able to obtain, pursuant to Department instruction of September, 1897, as to the manufacture of siphon bottles.*

I may state that it has been gained with the utmost difficulty, and in many cases in the face of absolute refusal on the part of manufacturers solicited to give any information whatsoever. In answer to my request for the names of manufacturers of siphon bottles, I obtained from the Chambre Syndicale de la Céramique et de la Verrerie the names and addresses of a number of prominent manufacturers, some of whom were located in Paris and others in the provinces.

It seems that a siphon bottle, before it is complete as such, is the product of two distinct operations. The bottles are produced in the first place by the glass manufacturers and bottle makers, and by them handed over to manufacturers of the metal top.

The manner of the adjustment of the top to the bottle, and the class of machinery necessary to accomplish the same, the makers maintain rigorously secret. I made several efforts to obtain admission to the manufactories, but was invariably, although with expressions of much regret, refused.

The several consuls in whose districts siphon bottles are manufactured have reported to me that they encountered the same difficulty that I have in Paris. The consul at Bordeaux writes me he was informed by a manufacturer in his district that "the method of attaching siphon and cap is a secret which it would be folly for him to disclose." In the neighborhood of Marseilles bottles are manufactured, but the metal portions are not supplied.

*For a series of reports in answer to Department instruction, see CONSULAR REPORTS No. 211 (April, 1898). Advance sheets of this report and of the one following have been sent to the party desiring the information.

The prices for these bottles, which are manufactured either by the continuous-fusion process or from glass which is melted every twelve hours (processes undoubtedly well known in America) are quoted in Marseilles as follows: Siphon, containing 1 liter (1.0567 quarts), 65 francs ($12.65) per hundred; half a liter, 55 francs ($10.62) per hundred; one-fourth of a liter, 45 francs ($8.69) per hundred.

The ordinary sized siphons are blown by hand operatives, but the unwieldy sizes are blown through a tube by machinery. The sand used in the manufacture is found in France. The nearest approach to any illustration I have been able to obtain in regard to the attachment of the metal tops and the manner of charging the water is contained in the illustrated catalogue, herewith inclosed,* of Messrs. Durafort et fils, of Nos. 162 and 164 Boulevard Voltaire, Paris. I also have the honor to transmit the list of the members of the Chambre Syndicale at Paris,* the names marked being such as were indicated to me as being manufacturers of siphons.

I regret the delay, which was due to the difficulties above mentioned, and trust that this very incomplete report may be of some service.

JOHN K. GOWDY,
Consul-General.

PARIS, *June 16, 1898.*

SIPHON BOTTLES IN ENGLAND.

The manufacture of siphons was introduced into England, about twenty years ago, by a London firm which now sells over 400,000 siphons annually. The vases or glasses are not made in England, being imported from the Continent (Europe), and consisting, as a rule, of the finest Bohemian crystal glass, although some manufacturers use part Austrian and part French glass.

The metal heads, which are made extensively in London, are manufactured by the leading firms from pure tin, no lead being used in any part of the siphon heads. A large number of firms, however, use a leaden mixture for the screw collars, lever handles, and screw-top caps, none of which come in contact with the water.

When the head has been fitted to the vase, or glass bottle, it is tested with a pressure (air and water) of 300 pounds per square inch.

The average selling price of the complete siphon in England is 18s. ($4.38) per dozen, except in the case of large contracts, when this price is somewhat reduced.

Fittings of parts of the heads are also sold in large quantities.

WM. M. OSBORNE,
Consul-General.

LONDON, *May 31, 1898.*

* Filed for reference in Bureau of Foreign Commerce, Department of State

COTTON TRADE OF THE WORLD.

Consul Morris sends from Ghent, under date of May 28, 1898, a clipping from a local newspaper, as follows:

The cotton industry, formerly almost exclusively localized in Lancashire, is to-day cosmopolitan. Unfortunately for Lancashire, numerous adverse influences have for almost a quarter of a century unfavorably affected this district.

In normal years, India takes about 40 per cent of the cottonades exported from England; in 1896–97 it took only about three-fourths of its ordinary share. Famine and pestilence have forced the inhabitants of Bengal to limit their purchases. The Argentine Republic and other South American states have, because of financial and political troubles, decreased their demands. The protective tariffs of Italy, Spain, and other countries have likewise done much harm to British manufactures.

According to a report from the English vice-consul at Fez, the cottonades manufactured in the French factories of Pondichery are supplanting Lancashire products in Morocco. In consequence of these changes, the distress in certain cities of northern England is extreme. At Burnley, where are manufactured large quantities of goods intended for the Indian and South American markets, the depression is such that the oldest workmen declare that their situation has not been so bad since the thirty days' famine during the American civil war.

In the English market itself there are unfavorable circumstances; certain classes of goods of superior qualities are now less in demand. Instead of elegance of design, strength and probable wear are desired in textiles, so that manufacturers in certain lines can no longer dispose of their products.

There is, however, some compensation for these unfavorable influences. Scandinavia is buying more and more of the first qualities of Lancashire products, and the English colonies are becoming better clients than ever. But, full account taken of these exceptions, it remains a fact that the general situation is critical.

To retain their markets, the English have to exercise more and more inventive qualities; it is evident that the manufacturer who continues to produce articles which he has been in the habit of selling, runs great risk of being supplanted by his more energetic competitors. Fashions change, even in barbarian lands; certain marks formerly in vogue are now disdained.

The value of cotton yarns and cottonades exported from England during the first nine months of 1897 was £47,000,000 ($229,125,500), as compared with £59,000,000 ($287,123,500) for the same period of 1892. Cottonades do not to-day represent more than 27 per cent of the total of British exports, against 31⅓ per cent a quarter of a century ago.

Without doubt, there has been a great reduction in the price of manufactured articles; none the less the fall in the price of exported cottonades is heavy—from 37 cents per pound in 1872 to 22½ cents per pound in 1897. The price of raw material has, it is true, fallen considerably; but wages, if anything, have slightly increased.

In Germany and Austria, complaints are made that the cotton industry is no longer profitable, by reason of overproduction and the competition occasioned by the introduction of new machinery. During the last season, about 500,000 new spindles were worked in Germany, and spinning mills with a capacity of from 300,000 to 400,000 more were being built. In France, also, there is overproduction and less demand. Taking the Continent as an entirety, an increase in consumption is noted, corresponding to the inauguration of 1,000,000 new spindles.

In the United States the season was not good, but future prospects are better; the rapid progress of the cotton industry in the Southern States is striking. The increase in spindles during 1896–97 in the South was 445,000, against 100,000 in the North.

The quantity of cotton consumed by Europe, the United States, and India for the season of 1896–97, as compared with that of 1860–61, was:

Consumed in—	1896–97.	1860–61.
	*Bales.**	*Bales.**
Great Britain	3,224,000	2,091,000
European continent	4,368,000	1,379,000
United States	2,738,000	807,000
India	1,000,000	52,000

* Of 500 pounds.

The total was 11,330,000 bales in 1896–97, as compared with 4,329,000 in 1860–61.

The number of spindles in 1897 and 1893 was:

Number of spindles in—	1897.	1893.
Great Britain	44,900,000	45,270,000
European continent	30,320,000	26,850,000
United States	17,356,000	15,641,000
India	4,000,000	3,576,000

The total demand for 1897 is estimated at 10,740,000 bales—7,696,000 for Europe, 2,844,000 for the United States, and 200,000 for Canada, Mexico, etc.

In 1896, the total was 10,512,000 bales—7,592,000 for Europe, 2,744,000 for the United States, and 176,090 for Canada, etc.

Consul Monaghan, of Chemnitz, under date of June 14, 1898, says:

The lands that lead in cotton production are the United States, India, and Egypt, half of the entire product coming from the United States. The crop of the world in 1895–96 was estimated at 27,000,000 tons (of 2,204 pounds). India, in 1895–1897, produced 2,765,000 bales; Egypt, 1,238,000 bales. China's production in 1894, was estimated at 1,000,000 bales of 400 pounds; but this covered only the cotton that came to the coast cities. With the opening of China will come great development in the cotton industry. Central Asia offers opportunities in the same line. Its crop in 1896, the only year for which one finds figures, was 65,500 tons, or 360,000 bales. Everyone in Germany is eagerly watching the developments in China and central Asia. The desire to get along without the aid of the United States is so great that no efforts are made to conceal it.

COTTON INDUSTRY OF FRANCE.

From a report recently published by MM. Grandgeorge and Cabourier, it appears that the capacity of French spinning mills did not appreciably increase in 1896. The number of new spindles in the north is estimated at 25,000, and in the east at about the same figure; but, taking account of the old spindles which may have been destroyed, it is apparent that 5,400,000 spindles represent approximately the capacity of French spinning mills. It was in 1892 that the largest quantity of cotton was imported into France—202,000 tons. Deducting reshipments, about 175,000 tons of cotton remained in France that year. Since then the imports have decreased; in 1894, they amounted to a total of 186,000 tons, of which, after reexportation, about 155,000 tons remained for use.

These figures might be thought normal and subject to increase; on the contrary, in 1895 and 1896 there was an appreciable decline. In 1895, only 139,000 tons, and in 1896, only 133,000 tons, were consumed.

As regards the trade in foreign cotton yarns, France imports less and less quantities every year. The figures before 1890 averaged 12,000 tons; in 1896, the imports were 4,589 tons. At the present time, the quantity of cotton yarns imported by France is scarcely equal to 3.5 per cent of the domestic production. Still less cotton, however, is exported—less than 1 per cent of the French production. The French yarn industry, therefore, depends on domestic conditions.

It is estimated that in 1896 France exported about 27,000 tons of cotton textiles. The output of French spinning mills being about 130,000 tons, it may be said that the export trade in cotton textiles represents more than one-fifth of the total production of France.

The exportation of plain and plaid cotton textiles is increasing. From 11,000 tons in 1890, it rose to 17,000 tons in 1895 and 18,500 tons in 1896. The ascendant movement is marked and rapid, and on reading these figures one is inclined to believe that the products of the French cotton mills have an importance on the international markets of the world. Such an idea, however, is misleading, for it must be borne in mind that of the quantity exported 12,000 tons or more are destined for colonies and markets reserved to French industry. Only the balance—6,500 tons, valued at $5,000,000—comes into the world's markets to compete.

HENRY C. MORRIS,
Consul.

GHENT, *April 27, 1898.*

THE DIESEL CALORIC MOTOR AT THE MUNICH EXPOSITION.

In a report describing briefly the new caloric motor invented by M. Rudolf Diesel,* it was stated that at the machinery exposition to be held at Munich this summer a collective exhibit would be made by the several firms and companies in Germany which have begun the manufacture of Diesel motors of different types for practical use.

The exposition was opened with great éclat early in the present month and will continue until October. The display of Diesel motors occupies a special building, and, in view of the originality and vast economic importance of the new engine, is recognized as the most interesting feature of the exhibition. The interest manifested in this invention by American engineers and machinists has been so general and insistent that a brief account of what can be seen at Munich during the coming three months may be of timely import, although it is generally known that all patented rights for the construction and use of the Diesel motor in the United States have been acquired by an American company whose main office is at No. 11 Broadway, New York.

The collective exhibit at Munich is made by the Augsburg Machine Company, where the invention of Mr. Diesel was first built and tested in practical form, Messrs. Fred Krupp, of Essen, the Machinery Construction Company, of Nuremberg, and the well-known Otto Gas Motor Manufacturing Company, of Deutz-Cologne—four of the most important and powerful manufacturing firms in Germany, whose names form a sufficient guaranty of the industrial value of the new engine. The Diesel motors on exhibition are five in number, and are described in the official catalogue as follows:

(1) By the Augsburg Machinery Company: Single cylinder, 30-horsepower motor, for petroleum fuel; drives a rotary pump that lifts 1,600 liters (398 gallons) of water per minute to a height of 60 meters (196.7 feet).

(2) By Fred Krupp, of Essen: Single-cylinder, 33-horsepower engine, which drives a high-pressure, centrifugal pump that draws up from the River Iser a stream of water that is projected through a 2-inch nozzle at 45° elevation to a distance of 230 feet into the river.

(3) By the Machinery Construction Company, of Nuremberg: A single-cylinder, 20-horsepower motor, which, at a speed of 180 revolutions per minute, is used for purposes of test and demonstration.

*See CONSULAR REPORTS No. 208 (January, 1898), p. 21.

(4) By the same company as above: One double-cylindered, 40-horsepower motor, coupled directly to a Schückert dynamo, and at 180 revolutions per minute generates current for lighting the pavilion and driving a fast rotary printing press and several machine tools which are installed in the same building.

(5) By the Otto Gas Motor Manufacturing Company, of Deutz-Cologne: One single-cylinder motor of 20 horsepower, which propels a Linde condensing machine for the production of liquefied air.

Besides the four firms above named and represented at the Munich Exposition, three others—viz, the H. Paucksch Company, at Landsberg-on-the-Warthe; L. A. Rudinger, of Augsburg, and the Diesel Motor Fabrik, a special establishment organized at Augsburg for the purpose—are all now interested and engaged in the manufacture of Diesel motors for practical use. The invention, which was first publicly described at the meeting of the German Engineers' Association hardly a year ago, has thus already entered upon its career of economic usefulness.

The Munich Exposition of 1888 revealed as its dominant note the previously unknown preeminence of Germany in the development and utilization of the gas engine as a source of motive power, and it will be the principal function of the exhibition of 1898 to show in how far the Diesel motor surpasses—in respect to economy of space and fuel, cleanliness, and practical efficiency for a wide range of purposes—all other motors, whether propelled by steam or which dispense with the evaporation of water and burn the fuel inside the cylinder.

FRANK H. MASON,
Consul-General.

FRANKFORT, *June 25, 1898.*

A NEW INCANDESCENT FILAMENT FOR ELECTRIC LIGHTS.

The German Journal for Gas Lighting of recent date contains some highly interesting information upon what is perhaps the most important new topic in the science of illumination, namely, the improved incandescent filament for electric lamps, which has just been announced by Dr. Auer von Welsbach, the distinguished inventor of the incandescent gaslight which bears his name. It was but natural that, having perfected the device which increases so remarkably the illuminating power of gas, Dr. von Welshbach should seek to develop some similar improvement for the application of electrical currents to illuminating purposes.

This he appears, from the somewhat meager accounts published, to have found in a filament of osmium, one of the rare metals,

which, besides being the densest of all metals, is the most refractory, being infusible at any except the highest attainable temperatures. Osmium is found native as an alloy in certain ores of platinum and iridium. It is a hard, bluish-gray metal, with an atomic weight of 191.1, and the enormous specific gravity of 22.477, the heaviest substance known. Its tetroxide has a strong odor of chlorine, from which circumstance its name was originally derived.

But the property which must have suggested osmium as the material of the new electrical filament was its practical infusibility, its known resistance to temperatures in which platinum and iridium volatilize and disappear. It is well known that the intensity of light emitted by an incandescent substance increases rapidly with its absolute temperature. By heating osmium in a vacuum with an electrical current strong enough to volatilize platinum, it attains a luminosity hitherto almost unknown, emitting a white light of agreeable quality and color, but of great intensity.

So far as can be inferred from what has been published, the experiments of Dr. von Welshbach go quite beyond the employment of a naked osmium filament, and include coating the metal with a refractory oxide like thoria.

It has long been known that a platinum wire or filament, through which a sufficiently strong current is passed, attains a white heat and then suddenly melts. If, however, the filament be coated with a highly refractory oxide like thoria, the temperature required to melt it is greatly increased, for the reason that part of the electrical energy is withdrawn from the metal to its oxide coating and is radiated in the forms of light and heat. Precisely the same result happens when the filament coated with oxide is of osmium, instead of platinum, and the resistance of the filament is still further increased to the extent that osmium is in itself more infusible than platinum.

There is thus obtained a filament capable of sustaining a temperature and consequent intensity of illumination hitherto unachieved by such means, and it is this which forms the germ of the present invention of Dr. von Welsbach. It has been noted in his experiments that osmium used for this purpose must be almost chemically pure, and that commercial forms of that rare and costly metal require, before using, to be cleansed as far as possible of all impurities except platinum, a small admixture of which renders the osmium more elastic without sensibly diminishing its infusibility. The whole effect of the invention, if practically applied, will be to advance in an important degree the limit of electrical energy which may be used in incandescent lighting and thus reach a new standard of economy in the production of artificial light, which is cheapest at the intensity obtainable only at high temperatures.

Osmium, according to the trade catalogue of a leading German chemist, costs $1.10 for 20 grains; so that if the new filament should become successful in general use, there will be a demand for a larger supply of that metal at a more moderate price.

FRANK H. MASON,
Consul-General.

FRANKFORT, *July 5, 1898.*

THE PRESENT AND PROSPECTIVE SUPPLY OF CALCIUM CARBIDE.

The rapidly increasing use of acetylene has pushed the demand for calcium carbide so close to the present limit of available supply that the questions of increased productive capacity, the future output, and probable price of this new and important material assume a definite international interest.

It is understood that the use of acetylene, and consequently the consumption of carbide, has increased somewhat more rapidly in America than in Europe, and that, notwithstanding the large output at Niagara Falls, the home demand has rather more than kept pace with the supply. The latter may practically be also said of Europe—at least of Germany, which country, notwithstanding its preeminence in all kinds of chemical manufacture and all that one hears and reads of new plants projected or under construction, still obtains almost its entire supply of carbide from Switzerland, notably from the great works at Neuhausen.

A year ago about the only manufacturer of carbide in Germany was a company at Bitterfeld, in Prussian Saxony, which smelted the lime and carbon by electrical heat generated by steam power, and found itself, for that reason, unable to compete, and so suspended operations and removed its plant to Neuhausen, where it has reopened with water-power generators and a largely increased capacity.

The whole carbide industry, so far as central Europe is concerned, is now in a transition stage, and the conditions of supply and price are likely to be greatly modified by the increased production of next year. The Compagnie Genevoise, at Vernier, on the Rhone, near Geneva, has greatly enlarged its plant and is making contracts for 1899 at a considerable reduction from present rates.

But the most important accession will come through the operations of the great combination headed by the Schückert Electrical Manufacturing Company, at Nuremberg, which, as is stated on published authority, will increase its capital to 28,000,000 marks ($6,664,000)

and expects to have in operation during the course of next year the following carbide factories:

	Horsepower.
Electrical Works Lonza, at Gampel (Wallis)	2,500
Electrial Works Hofsland, at Sarpborg, Norway	5,000
Bosnian Electrical Company, Iajce, Bosnia	8,000
Société Espagnole, Brega (Catalonia)	2,500

The aggregate annual product of these four plants is estimated at 20,000,000 kilograms (20,000 metric tons), capable of generating 6,000,000 cubic meters (211,896,000 cubic feet) of acetylene. Besides these, the Aluminium Industry Company, of Neuhausen-on-Rhine, has this year increased its capital to 16,000,000 francs ($3,088,000) for the purpose of constructing a 7,500-horsepower plant at Land-Gastein, in Austria. All these establishments will employ the original process, by which the lime and carbon are smelted together by the heat of an electric current.

The Walther process, briefly described in a former report of this series,* smelts the same materials by the heat of darting acetylene flames intensified by mechanical pressure, and is employed by a company at Leipsic, which has works at Cassel and now advertises its product in the special organ of the carbide industry. Although this company is said to have exhibited at Berlin carbide samples of very high quality, there seems to prevail among business men some doubt—which may be only the conservative prejudice that discredits all new things—as to whether this process can be made to compete economically with electrical heat generated by water power under favorable conditions. So far as can be ascertained, a favorably located and well-managed water-power plant in Germany or Switzerland ought to produce carbide of standard quality at a net cost of 160 marks ($38) per metric ton, and it is doubted whether this minimum figure can be much reduced by any process now in practice. The consumption of acetylene will have to increase rapidly after next winter to keep pace with the great augmentation in the carbide supply that will then occur.

Already the effect of this future increase in production exerts a definite influence upon contract prices, and a large purchase for next year's delivery has recently been made at a reduction of 20 marks ($4.76) per 100 kilogram (220 pounds) from the market price of the same firm for 1898. Carbide is a form of merchandise which varies exceedingly in price according to the quantity involved in the transaction. So far as can be ascertained, manufacturers now receive from railways and other consumers or wholesale dealers who purchase in large quantities from 34 to 35 marks ($8.09 to $8.33) per

* See CONSULAR REPORTS No. 206 (November, 1897), p. 337.

100 kilograms, packing charges not included. Consumers of small quantities have to pay to dealers from $10.25 to $11.90 per 100 kilograms, exclusive of packing, the price between these two figures being governed by the quantity purchased.

The standard guaranteed strength is 300 liters of gas per kilogram of carbide, and the present situation may be summarized as follows:

There is now in the European market no apparent surplus of carbide, and the current supply is taken up as fast as it is turned out.

There is even a demand that would justify some importation, provided the foreign-made carbide were of standard quality and could be furnished at prices within the local market rate and under conditions of delivery and payment that prevail here.

This situation can probably not continue beyond the close of the present year. The several large, new carbide plants that will be started up next winter and spring will so increase the output as to probably reduce the market price to a fair profit above net cost of production, and, unless the use of acetylene increases phenomenally, leave a surplus that will be available for export.

Calcium carbide is, however, a somewhat critical kind of merchandise for international traffic. The requirements of railways and steamship companies in respect to packing, etc., are so costly and difficult of fulfillment that in one recent case a large order of carbide for China had to be canceled because it was impossible to comply with the specifications for its transportation.

FRANK H. MASON,
Consul-General.

FRANKFORT, *July 6, 1898.*

PAPYRISTITE.

Since taking charge of this consulate, I have at different times received communications from the United States inquiring about a certain artificial material called papyrolith, in regard to which my predecessor sent a report to the Department.*

I have made diligent inquiries, seen samples of the material, and now, for the benefit of the public, beg to report as follows:

A new artificial stone or moss has recently made its appearance on the builders' technical market, called papyristite, on account of the ingredients entering into its composition, principal among which is purified paper pulp, obtained from waste paper.

*See CONSULAR REPORTS No. 198 (March, 1897), p. 343.

Papyristite is an improvement on papyrolith, both having been invented by Mr. Fr. Gehre, a civil engineer of Zurich. It can be used in various ways, but is specially intended to serve as a solid, impermeable, and jointless roof or floor, which, when once laid, will present a smooth surface as if made in one continuous layer. This new material, I am told, is a nonconductor of heat, cold, or sound, and, although as hard as stone, has a soft, linoleum-like feeling to the foot, and is noiseless.

Accumulations of dust, vermin, or fungi are impossible, there being no grooves or joints. The weight is much less than that of stone or cement.

One hundred kilograms (220 pounds) of this preparation in a powdered form, when mixed for use and spread to a thickness of 10 millimeters (0.3940 inch), will cover a surface of 8½ square meters (91½ square feet)

The ingredients for the manufacture of papyristite are obtainable in the United States, and the cost is exceedingly low.

No machinery is necessary to prepare the compound, although to save labor, where great quantities are to be used, an ordinary press can be utilized to advantage. It can be molded or spread in any desirable form or shape, as is the case with cement. The mixing is done on the spot, where it is wanted, and it is transported, like cement, in barrels or sacks.

The drying or hardening process is effected in twenty-four hours after spreading, and then, if desired, it can be polished to a high gloss. The inventor's numerous experiments have given good results, and his persistent efforts seem at last to have been crowned with success.

Taking the opinion of prominent architects who have experimented with this new material, there seems to be no doubt that a valuable building material has been discovered, which can be utilized in many ways. It is as hard as marble, and is practically indestructible, yet it is elastic and possesses all of the qualities mentioned above.

It can be cut, sawed, and bored; given any desirable tint, and made to look like marble or mosaic.

For roofing purposes, it is also valuable. A light iron framework has been invented by Mr. Gehre, and the material is put on in the form partly of plates and partly of mortar, which, when united, produce a smooth, continuous surface. It is adapted to cold as well as to tropical regions, and its stone-like qualities protect it against mice or other vermin. Trials of this material have been made in Russia and Brazil, and the reports received are very encouraging. It will probably be widely used in the near future.

The material once laid will never contract or warp; and where the instructions for the mixing process are well carried out the results can not fail to prove all the inventor claims for his product. It is elastic, light, and inexpensive in production.

For schoolrooms, public halls, corridors, bath rooms (both floor and walls), terraces, barns, poultry yards, etc., no better, cleaner, and healthier material can be found; and, as a nonabsorbent of moisture, filth, or other unhealthy substances, it is no doubt without equal as a building material.

Patents for the process and material, as well as for the roof frame necessary thereto, have been applied for in the United States.

The inventor will furnish, upon application, samples of the finished material to parties who pay express charges, or will sell the raw ingredients to the party wishing to experiment at 18 marks ($4.50) per 100 kilograms (220 pounds), free on board cars at Zurich.

For other information, address Papyristite Company, Post Fach 10469, Zurich, Switzerland.

A. LIEBERKNECHT,
Consul.

ZURICH, *June 22, 1898.*

VALUE OF THE GERMAN WORKINGMEN'S INSURANCE SYSTEM.

Time is proving the practical value of the German workingmen's insurance system. If I return to the subject again, it is because I believe it to be one deserving a great deal of attention. The social and economic influence of so gigantic a system must be very great.

The object of the system is to alleviate the sufferings of workmen and their families: (1) In cases of sickness (sick insurance); (2) in cases of accidents incurred at work (accident insurance); (3) in cases of feebleness, wasting diseases, decreased capacity to work, and old age (invalid and old-age insurance).

In cases coming under No. 1 there is given free medical treatment; sick money—that is, money during period of sickness with which to obtain medicine, nourishment, etc.—or, if desired, free treatment in a hospital and support for the family; and money, in case of death, is supplied the family. The fund is furnished by employers and employed—the former paying one-third, the latter two-thirds.

In cases of accident insurance the parties receive support during convalescence, from the fourteenth week after the accident happens. Money is given the wounded person from the fifth week. Rents are paid from the first day of the fourteenth week after the accident. The rents amount to two-thirds, and in some cases to three-fifths, of the workman's yearly salary.

The fund for burial expenses is furnished by the employers. In cases coming under invalid and old-age insurance, the parties receive rents from the time they are unable to work, without regard to age; old-age rents, from the seventieth year, even if they can work and do not draw invalid rent; and assistance against disease so as to prevent incapacity. In case of his death or marriage, the full sum paid by the party is returned.

The following amounts were paid out in the years given:

Year.	Sick insurance.	Accident insurance.	Invalid and old-age insurance.
1885–86	$23,905,005	$460,625	.....
1887	13,138,099	1,412,030	.....
1888	14,651,637	2,304,173	.....
1889	16,892,097	3,442,503	.....
1890	20,013,420	4,835,041	.....
1891	21,243,594	6,289,483	$3,643,089
1892	22,433,499	7,696,967	5,344,742
1893	24,269,264	9,082,984	6,700,509
1894	23,702,063	10,539,044	8,332,475
1895	24,947,731	11,929,940	10,221,647
1896	26,114,026	13,602,747	12,293,533
1897	26,207,417	15,252,301	14,161,000
Total	257,517,856	86,847,842	60,696,997

During the years from 1885 to 1897 employers had paid in 1,337,741,176 marks ($318,382,399), and workmen 1,173,449,805 marks ($279,281,053), a total of 2,511,190,981 marks ($597,663,452). Of this amount 1,702,184,100 marks ($405,121,816) have been paid out. Thus the workmen have already received 528,700,000 marks ($125,830,600) more than they have paid in.

The annual amount paid out is increasing at the rate of 15,000,000 marks ($3,570,000) per annum. The reserve fund at the end of 1897 was, in round numbers, 850,000,000 marks ($202,500,000).

For every twentieth person of the Empire's population, one has been paid insurance.

Besides this system, there are others by which workingmen are aided. There are State and private insurance and pension systems. One alone, the Miners' and Smelters' Union, paid out in the years 1895–1897, inclusive, 320,000,000 marks ($76,160,000). From 1900 on, the annual amount to be paid out will be upwards of 300,000,000 marks ($71,400,000), or 100 marks ($23.80) for every working-day in the year. Whether a system which makes so much for paternalism is one to commend, I can not say. Its effects here have been anything but bad. Poverty, in spite of poor wages, is practically unknown.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *June 6, 1898.*

GERMANY'S STRAW INDUSTRY.

The manufacture of straw is one of the most important industries of this Empire, giving thousands means of support. I believe it could be profitably introduced into Wisconsin, Minnesota, northern Michigan, the woods of Maine and hills of Vermont, New Hampshire, and western Massachusetts. Straw, that once served only for fuel or fertilizing purposes, is put up by these people into the most useful, beautiful, and fantastic forms. Plates, dishes, baskets, boxes, tables, trunks, fans, hats, caps, mats, etc., are made by the million and sent to all parts of the world. In a stretch of country containing 6 square miles, there are 10,000 persons employed in making articles of straw.

Of the straws used, the best come from Tuscany. They are rye and wheat straws, and are known as the "grano marzuolo," or March grain. It is sown in March, very thick, to prevent the blades from growing too fast or strong. In June it has grown to a length of 18 or 20 inches and is ready for use. The rye and wheat is torn out by the roots, bound into small bundles, exposed to the sun but not to the rain, and is then laid aside for one or two years' seasoning. Before being worked, the bundles are spread out like fans, exposed three nights to the dew and three days to the sun; they are then turned to expose the other side two nights to the dew and three days to the sun. In this way, the straw that was green becomes a beautiful yellow or golden white. The ears and roots are now removed, and the stems are sorted into twelve to twenty different sizes.

The sorting is done by means of sieves graduated from coarse openings to fine ones. The straws are then arranged, according to length, into three classes and fastened in bundles, which are steeped in water, allowed to drip, and then placed upright around a practically air-tight room, in the middle of which is a brasier full of burning sulphur. The sulphur is renewed each evening till the straw becomes a beautiful white. The sorting has separated only the thick from the thin, the short from the long; there remains the difference in size between the top and bottom of each separate stem. To obviate this the stems are cut again twice, leaving only about 2 or 3 inches of the middle, which has a uniform thickness; these are woven into the finest hats. The other ends are also woven into hats, caps, etc. This process prevails not only in Tuscany, but in Lombardy, Switzerland, and France; but the French or Swiss straw is said to be neither so strong nor so beautiful as the Italian. In Italy, the straw is worked up whole; in Switzerland and Germany, it is split. In

Saxony, the straw passes through nine processes from the moment it is cut by the reapers. The stems are first drawn through a rake or toothed utensil till the ears, roots, and projecting leaves are removed. The next step is the arranging of the corn into sheaves; the third consists in removing the knots and cutting the stems into three lengths or pieces. The upper or thinnest is the most valuable part. The straw is then dampened and placed for twenty-four or thirty hours in the upper part of an apparatus consisting of two compartments, one over the other. In the lower is burning sulphur, the fumes of which enter the upper through hundreds of little holes, bleaching the dampened straw. The next step consists in again sorting according to length and thickness, and splitting by drawing the straw over a toothed, saw-like piece of steel. Even the very coarsest straw can be utilized for fine work by splitting. The straws are then plaited into bands, trimmed, wound, and sewed. Formerly the sewing was all done by hand; rapidly increasing competition compelled manufacturers to introduce machines. Even now it is a question whether Germany or any western people will be able to compete in this and kindred industries with Japan and China.

In this branch, as in almost if not quite every other industry of the Empire, education is developing a class of skilled labor whose capacity to compete increases with the years. Saxony alone has six such schools. I wish it were possible to impress upon our people the importance of manual training and technical education.

J. C. MONAGHAN,

CHEMNITZ, *June 1, 1898.* *Consul.*

GERMAN OPPOSITION TO UNITED STATES PORK.

Consul Warner transmits from Leipsic, under date of June 4, 1898, the following report from Consular Agent Neuer of Gera:

Under the pretense of protecting the sanitary condition of the people, an unjust and systematic war is waged against American pork in this city. Warnings are published by the magistrates against the consumption of raw American pork, though every piece of bacon and ham is subject to an inspection by duly authorized examiners before entering trade. Dealers in our hog products are required to hang signs in conspicuous places in their stores bearing the inscription "Amerikanische Fleischwaaren" (American meats). No means are left untried to create widespread prejudice, and all local papers take up the subject of trichinæ in American pork as one of their favorite themes.

The inspection fees have recently been doubled, and now amount

to 25 pfennigs, instead of 12½ pfennigs as before, for every piece of bacon or ham, resulting, for instance, in an expense of from 35 to 40 marks ($8.33 to $9.52) per tierce of boneless hams.

Not long ago a shipment of corned pork was detained to undergo inspection, thereby exposing the meat to decay and practically prohibiting its entrance. Moreover, the Gera authorities have ordered all American pork to be conveyed to their slaughterhouse for microscopic examination, regardless of whether it is to be sold here or elsewhere, a measure very detrimental to the interests of the dealers in this city.

Not one case of death or even of disease can be attributed to the consumption of American pork, while I know of several cases of trichinosis from the use of freshly slaughtered German pork, in spite of microscopic inspection. If one case of trichinosis could be traced to meat from our country, the fact would be published far and wide, and it is probable that imports of American pork would be prohibited. It is an established fact, however, that in consequence of the salting, pickling, and smoking to which our hog products are subjected, the trichinæ are no longer living, or have at least lost the power of reproduction in the human body.

From my personal experience I am able to state that I have never known a microscopist to state that he had observed trichinæ manifesting any sign of life in well-salted meats.

The reasons for this agitation against our hog products are, it is almost generally conceded, entirely selfish. Our meats are much cheaper than those of Germany and form an indispensable article of food for the poorer classes in this country, thus arousing the opposition of German hog raisers and wholesale butchers.

AMERICAN AND GERMAN MACHINERY.

Of all the products of American industry, there are none, for the time being, of greater interest for the export trade than those of our manufactures of machinery. It is certain that the United States has outclassed, in this particular branch, all the other industrial nations, and this fact is acknowledged to-day even by persons who, upon the whole, do not evince much friendship for our country.

The city of Bamberg is not an important place for industrial enterprises. By far the greater part of products exported from here is not made in this town, but in the neighborhood. Notwithstanding this, American machinery has been very successfully introduced at Bamberg, and every week the local newspapers contain advertisements touching the sale of American agricultural and tool-making machines.

Only a few weeks ago, a shipment of American machines to manufacture metal capsules for bottles (manufacturer, Bliss Company, Brooklyn) arrived here, and I am glad to be able to state that these machines were not only entirely satisfactory to the purchasers, but exceeded their expectations. This is worthy of note, considering that only a short time ago capsules made in Germany were exported to the United States.

American machinery for the manufacture of shoes can be found in any German establishment of importance, and the United States electric machinery (Walker Company, Cleveland) used in the electric street railway of Bamberg is giving entire satisfaction. This is saying a good deal, considering that one of the largest works for electric engineering in Germany (Schuckert, at Nuremberg) is within close proximity.

It may also be mentioned that American watches have made their appearance in this market and are finding ready purchasers. The people speak highly of the neat workmanship which is characteristic of all American machinery.

If our manufacturers, especially those of specialties, would take the good advice given to them in the CONSULAR REPORTS from time to time, good results would be bound to follow. Circulars printed in English are of no use in this country. This has been said by my colleagues and myself over and over again. Those who follow the example of two American gentlemen of my acqaintance who had a patent for an ingenious cigarette-making machine, and did not mind the trouble and expense of coming to Europe last year and showing their apparatus at work, may be sure of success.

We might learn a lesson from the German manufacturers. The figures of the export of German machinery for the first four months of this year again show that manufacturers here are straining every nerve to improve their foreign trade. The export of German machinery to Russia—Germany's largest buyer—has, after a short depression, again risen. Germany's exports of locomotives last year were chiefly to Belgium, Denmark, Austria-Hungary, Roumania, and Switzerland; while there was a decrease in this line to Russia, the Transvaal, and the Dutch West Indies. In cast-iron machinery France, England, Italy, Austria, Sweden, Switzerland, Japan, and Russia were better customers than before; the exports to Spain, Brazil, and Chile diminished. The greatest improvement is shown in forge-iron machinery for Russia; the quantity exported to that country during the first four months of this year was nearly twice as large as during the same period of 1897. Russia ought to become a great market for American machinery.

LOUIS STERN,
Commercial Agent.

BAMBERG, *June 13, 1898.*

THE GERMAN FARMER.

The American farmer enjoys great advantages over the German farmer in the way of modern labor-saving machinery, larger tracts of land, etc. As an offset to this, the German farms in a more intensive way, and generally produces full crops. These facts, however, would not enable them to fight against depression if they did not receive State aid and had not quite a perfect system of cooperation.

At many of the old universities, such as Berlin, Göttengen, Leipsic, Halle, Munich, etc., there have been founded argricultural colleges, and in all other colleges there are chairs of agriculture, with professors to lecture on the subject, thus disseminating a valuable amount of practical scientific knowledge.

"Cooperation," say the Germans, "is the farmer's stronghold and bulwark." There are cooperative credit banks, cooperative dairies, cooperative steam plows; and there is cooperation in drainage and irrigation. As a rule, the farms are devoid of small undergrowth, stumps, stones, creeping vines, etc. Timber is equally well cared for. In draining and irrigating the farmers are experts.

At present, a perplexing question is how to stop or check the exodus of labor to the cities, where wages are higher. The salaries paid farm laborers vary, but average 35 cents per day (50 cents during harvest), with the use of a small house, patch of ground (about one-half an acre), and the privilege of using the implements for cultivating same. Single men who board with their master are paid considerably less.

The German Government is endeavoring, both by legislation and education, to enable the farmer to compete with his rivals. Americans should try intensive farming.

JOHN E. KEHL,
Consul.

STETTIN, *June 10, 1898.*

BEET-SUGAR EXPORTS FROM GERMANY.

As a supplement to a report on the German beet-sugar industry by Consul-General Goldschmidt, of Berlin,* the consul-general adds that the total exports of sugar from Germany in 1896–97 (counting all grades, as well as stocks previously carried over) reached the enormous amount of 2,616,776,425 pounds. The amount, continues Mr. Goldschmidt, was unprecedented and will probably never be reached

* See CONSULAR REPORTS No. 211 (April, 1898), p. 494.

again, since the prices, especially for raw sugar, paid the producers no profits. This amount included 660,000,000 pounds of refined and about 530,000,000 pounds of raw sugar sent to England. The consul-general transmits the following table, with additional details:

Exports of sugar (net) from Germany to countries of destination during the year 1896–97.

Country of destination.	Sugar of class *—			Sirup and molasses.
	a.	*b.*	*c.*	
	100 kilos.†	*100 kilos.*†	*100 kilos.*†	*100 kilos.*†
Hamburg, free port	20,291	85,974	11,840	77
Belgium	1,000	6,278	1	2,872
Denmark	41,827	22,208	786	4,460
France	.....	188	.....	246,712
Great Britain	2,377,862	2,999,272	68,688	1,956
Italy	900	1,021	6	2
Netherlands	118,210	86,600	2,639	9
Norway	175	83,049	61,778	358
Portugal	24,360	6,795	20,947	.....
Russia	2	82,024	1,465	137
Sweden	235	3,058	188	281
Switzerland	1,221	103,997	120	2,443
Cape Colony	10	8,909	318	3
Other African countries and colonies	745	11,889	150	.....
Japan	1,484	216,849	34,440	.....
British East Indies	5	87,988	.....	1
British North America	139,218	274	.....	.....
United States	4,877,292	112,056	758	420
Chile	35	79,915	1,278	92
Colombia	11	10,329	.....	.....
Other American countries	315	10,592	3,569	438
British Australia	10	13,756	.....	10
Other countries	1,363	18,122	2,935	719
Total in 1896–97	7,606,571	4,051,143	211,906	260,450
In 1895–96	5,044,447	3,986,304	38,168	400,113

* The kinds of sugar belonging to the different classes are, since August 1, 1896, the following: (*a*) Raw sugar containing at least 90 per cent sugar, and refined sugar containing under 98 per cent, but at least 90 per cent, sugar; (*b*) rock candy and sugar in white, full, hard cakes, blocks, plates, sticks, or squares, or in white, hard, translucent crystals, containing at least 99½ per cent sugar; all these sugars come under custom-house supervision; (*c*) all other sugars containing at least 98 per cent of sugar.

† 100 kilograms=220.46 pounds.

RECLAIMING STERILE LAND IN GERMANY.

The value of agricultural land in this consular district is unusually high, the holdings per capita are small, and owners are consequently compelled to plant remunerative crops, reserving only sufficient ground for the cultivation of food products and forage for cattle. An interesting illustration in the attempt to retain, or even increase, the arable surface is at present to be observed 2 miles east of this city.

The valley of the Rhine is about 20 miles across at this point, the lower or river terrace consisting of agricultural lands exceedingly rich in loam and old river deposits, while 2 miles east of the river the second terrace rises to a height of about 40 feet, most of which consists entirely of fine sand, covered at various places by a thin film of loam and now used for the training of pines. Passing through several miles of artificial forest, one emerges to find better soil and ordinary farm lands used for raising wheat, oats, potatoes, and carrots.

The removal of the edge of the above-mentioned sand terrace was begun early in the spring, the material being transported by cars over a temporary track. The sand is removed by means of specially constructed dredges, and at this time of writing about 6 acres have been exposed, reducing the surface to the level of the farm lands on the lower or river terrace. The top crust of loam has been carefully removed from the sand terrace and carried down to the newly exposed surface of sterile river gravel to form new acreage, being there distributed and having a depth of about 6 or 8 inches. Over a great portion of this new surface, young cabbage plants are growing, and other crops will be started as rapidly as the loam is deposited and leveled.

This illustration is but one of many showing rigid economy among these hard-working inhabitants.

WALTER J HOFFMAN,
Consul.

MANNHEIM, *June 1, 1898.*

COMMERCE OF BELGIUM, 1897.

The commerce between Belgium and foreign countries for the year 1897 exceeds that of the preceding year by 3 per cent.

The importations and exportations combined for 1897 were $1,144,123,300, to which must be added $21,809,000, representing the value of diamonds in the rough and cut state imported and exported during that year. The value of diamonds imported in the rough state was $10,615,000, and $11,194,000 the value of cut diamonds exported.

The estimated annual production of rough diamonds from all mines is about $20,000,000.

The Belgian diamond cutters buy their rough diamonds at the international diamond market in London.

Table showing the value of rough diamonds purchased by the diamond cutters in Belgium for the years named.

1894	$7, 750, 000
1895	9, 650, 000
1896	10, 615, 000
1897	10, 615, 000

Wages paid to diamond cutters.

1894	$772,000
1895	965,000
1896	1,061,500
1897	1,061,500

In the year 1896, the importations from the United States into Belgium were valued at $33,504,800. During the year 1897, such imports amounted to $44,718,100, which shows an increase of 33 per cent for 1897. The principal increase occurs in grains, drugs, cotton, meats, oak and walnut woods, horses and colts, vegetables and vegetable substances, resins and bitumens, and fruits.

The exports from Belgium to the United States for 1897 show an increase of 24 per cent over those for 1896. In the official statistics of Belgium, such exports figure for $11,657,200 for the year 1897. The same statistics show the exports for the year 1896 to have been $9,437,700. It is to be noted that the declared value of merchandise exported from Belgium to the United States, as certified by the consular officers of the United States in Belgium for the year ended December 31, 1896, is stated at $11,216,077.68. The principal increase in the table of exports to the United States for 1897 consists of caoutchouc, unrefined sugar, skins, dyes, coals, linen and woolen goods, chemical products, arms, and rags.

The balance of trade between Belgium and the United States for 1896 was $22,288,722.20 in favor of the United States. The balance of trade in favor of the United States for 1897 was $33,060,900.

HENRY W. GILBERT,
Consul.

LIEGE, *June 24, 1898.*

CONGRESS ON TARIFFS AND LABOR IN ANTWERP.

An international congress treating of tariff legislation and the regulation of labor will be held at Antwerp between the 12th and 17th days of September next.

Public economists, socialists, manufacturers, merchants, employers, and workmen are invited to take part.

The topics proposed for discussion are as follows:

FIRST SECTION—TARIFF LEGISLATION AND TREATIES OF COMMERCE.

(1) What results have been derived from the application of the different tariff systems: (*a*) For the producer; (*b*) for the workman; (*c*) for the consumer.

(2) What ought to be the basis of the tariff legislation?

(3) Is it of advantage to have several tariffs of different rates?

(4) Are treaties of commerce advantageous? What points should they cover?

(5) When two powers join in a treaty of commerce, is it desirable at the same time to regulate by legislation the affairs of colonies which do not enjoy autonomy?

(6) What improvements can be effected in ascertaining statistics of foreign commerce?

SECOND SECTION—REGULATION OF LABOR.

(1) What is the best form of organization of trades unions?

(2) What influence upon industrial progress and upon the relations existing between employer and workman has been exerted by the institution of the inspection of work?

(3) What betterment in the condition of the workingman has been due to his own initiative?

(4) Is special legislation required to regulate the relations between employer and workman? If yes, how should laws pertaining to contracts for service be formulated?

(5) Should legislation in favor of the protection of infants be extended to cover their education?

(6) Under what conditions have hours of labor been limited, and how has the method worked? What has been this influence upon production and wages?

The congress will be in session six days. In order to insure liberty of discussion and to encourage free expression of opinion, the congress will not submit to vote any resolution. The Minister of Finances has accepted the honorary presidency of the congress, and the Belgian Government will be represented by four delegates.

GEO. F. LINCOLN,

ANTWERP, *June 1, 1898.* *Consul.*

ANGLO-AMERICAN CHAMBER OF COMMERCE IN BELGIUM.

Consul Roosevelt sends from Brussels, under date of June 29, a copy of the constitution and laws of the recently-founded chamber of commerce in that city, an account of which was given in his report of April 7, 1898.* A summary of the inclosure is given below:

The chamber shall consist of Englishmen and of citizens of the United States; also of those interested in the trade between Belgium, England, and the United States. The annual subscription shall be 50 francs ($9.65) for each member residing in Belgium, and 50 francs for every firm or company nonresident and having no agency in Belgium. The fee for life membership is 500 francs ($96.50). The consuls-general for Great Britain and the United States are honorary presidents, and the vice-consuls honorary members. The affairs of the chamber shall be managed by a council of thirty members, five of whom shall form a quorum, and shall consist exclusively of British subjects or of citizens of the United States. Ten members of the council shall retire annually. The annual

*See CONSULAR REPORTS No. 213 (June, 1898), p. 273.

meetings of the chamber shall be held in May, a quorum to consist of twenty members. Whenever a question arises for discussion that affects the special interests of either British subjects or citizens of the United States, the council shall divide itself into sections; the meeting shall resolve itself into a committee, with a chairman of the nationality whose interests are concerned. The members only of that nationality shall have a right to vote on the question.

Mr. Roosevelt also incloses a circular issued by the chamber of commerce, which reads as follows:

ANGLO-AMERICAN CHAMBER OF COMMERCE IN BELGIUM.

29, Boulevard Anspach, 29, Brussels.

WHAT THE CHAMBER DOES FOR ITS MEMBERS.

1. *Information as to standing of firms.*—The chamber procures, on application, and supplies to its members, but without any guaranty whatsoever, strictly confidential information in regard to the standing, credit, and reliability of Belgian, English, and American firms with which they may be doing or intending to do business.

2. *Agents and representatives.*—It affords special facilities to British and American firms desiring agents and representatives in Belgium by placing them in communication with firms or individuals likely to do business for them; and, when required, by submitting, without responsibility, lists of people applying at the chamber for the Belgian representation of British and American houses.

3. *Statistical and general information.*—It procures for its members statistical and other information from official, or from the most reliable, sources in regard to Belgian trade or to matters connected with or affecting trade with Belgium.

4. *Lists of firms engaged in particular trades.*—It provides from the most reliable sources the names of some of the principal firms engaged in a particular trade in Belgium, and also gives members the means of obtaining comprehensive lists for the sending of catalogues and circulars, if required.

5. *Advice of customs circulars and changes in tariff.*—It sends by special letter to each member whom it may concern notice of any changes in the Belgian tariff, and in the classification of goods, with a translation of any customs circulars and notices which may contain dispositions affecting his trade, the moment such documents are forwarded to the chamber by the Belgian Government. The chamber receives notice of these changes direct from the customs authorities by circulars which are not issued to the public.

6. *Intervention on behalf of members with Belgian customs.*—It intervenes with the highest customs authorities on behalf of its members when they have prima facie a reasonable case in which goods have been too highly taxed.

7. *Representations to home governments on behalf of members.*—It upholds the interests of British and American traders with Belgium by representations to the home Governments in cases when legislation is apprehended which might be contrary to their interests, or when legislation is required for their benefit.

8. *Books of reference at the disposal of members.*—It holds at the disposal of its members for reference a very complete and valuable set of directories of important British, American, and Belgian cities, and of codes for the purpose of deciphering code telegrams. The library of works of reference and official publications of the British, American, and Belgian Governments is open to members within office hours. A large number of English, American, and Belgian trade papers are also received by the chamber and held at the disposal of members.

9. *Legal opinion on effect of Belgian legislation published in cases of general interest.*—When legislation affecting or likely to affect the interests, commercial or otherwise, of the English or American communities in Belgium is adopted by the Belgian Government, the practice of the chamber will be to obtain for the benefit of members legal opinion as to the effect of such legislation. And such opinion will be published and distributed gratuitously to members in the shape of special circulars.

10. *Participation in exhibitions.*—The chamber does everything in its power to further the interests of British and American traders wishing to take part in exhibitions held in Belgium, and to render them every possible assistance.

EXPORTATION OF FIREARMS FROM BELGIUM.

I notice in a report on Belgian exports to the United States, dated April 1, 1898, and published on page 276 of CONSULAR REPORTS No. 213 (June, 1898), under the title of firearms, Consul Gilbert, of Liege, calls attention to what appear to be errors in the report on the same subject written by me and published in CONSULAR REPORTS No. 210 (March, 1898), page 428. Consul Gilbert states that the figures given by me for the exports of firearms from Belgium to the United States are too small.

I only beg leave to quote my authority for the statements made by me. All the statistics in my report were drawn from the official publication of the Belgian Minister of Finance known as the General Statement of Commerce with Foreign Countries, published annually. This work contains the official valuation of Belgian imports and exports, as determined by the custom-house authorities of this country. It is the only publication of the Belgian Government giving such statistics, and it is thus the only work of reference to which anyone desirous of studying this trade may in general have recourse.

For all trade reports treating of many countries, it is preferable to take statistics from the same source, so that they may be based upon the same relative valuation. Upon a previous occasion, when I called attention to the variations between the statistics of the Belgian Minister of Finance and those existing upon the records of this consulate, it led to a lengthy and unavailing discussion with the Belgian authorities. While, therefore, the figures of the Belgian Minister of Finance and those of our own consulates may vary as to the amount of the United States trade in every article, still in all general reports treating of our trade and at the same time of that of other foreign countries, we must use the Belgian figures or become irretrievably lost when we come to compare the respective amounts in question.

HENRY C. MORRIS,
Consul.

GHENT, *June 28, 1898.*

STRAW AND FLAX GOODS IN BELGIUM.

The declared value of the annual exports of straw goods—braids for making or ornamenting hats—from the consular district of Liege to the United States averages $62,000. About an equal amount of these goods, made in this consular district, is received at the port of New York via England.

The Societé Anonyme Liniere de Saint Leonard, located in Liege, employs 2,000 workmen (capital, $900,000) and produces annually 900,000 bundles of flax and tow thread. A bundle equals 60,000 yards. The Directeur Gérant of these spinning mills informs me that all exports from his mills to the United States are made through London houses, and consequently no such goods are invoiced at this consulate.

The Liniere Gantoise, situated in Ghent, has a capital of $1,500,000 and puts upon the market annually about $1,800,000 of manufactured merchandise. These spinning mills are among the largest in Belgium, employing 2,600 operatives. The manager of these works writes me that they have exported directly to the United States goods to the value of only $20,000. He says:

> A great part of our product passes to the United States by the intermediary of English houses, especially in the form of thread, linen, and damask goods.

The braiding of straw and the manufacture of straw hats is a specialty of the valley of the Geer, which is one of the most productive agricultural sections of Belgium. Straw braiding is a house industry and gives profitable employment to all the peasants of the valley. During the inclement weather the whole family is occupied in selecting and braiding the straw, which is sold for cash or exchanged for provisions, etc.

If the braiding of straw goods could be established in agricultural districts in the United States, it would afford a light, agreeable, and profitable occupation for our people.

HENRY W. GILBERT,
Consul.

LIEGE, *April 22, 1898.*

THE ROUND COTTON BALE AT GHENT.

The cotton industry at Ghent is of importance; there are 22 establishments, with 565,202 spinning spindles and 84,642 twisting spindles. The amount of cotton bought and sold in this city is therefore considerable, and the possibility of supplying this demand

is worth the attention of American growers. As a matter of fact, cotton has in recent years been imported here in considerable quantities directly from the United States, some also arriving by way of Antwerp. Egyptian and Indian cotton, however, has always strongly competed with the American product. One of the causes retarding the development of American trade has been the great annoyance occasioned by the arrival of the bales in bad condition. Cotton spinners have for many years looked forward to some improvement in the method of packing cotton which should insure its arrival in foreign markets in good condition. The invention of the round bale has therefore attracted much attention. It would seem as if this method of packing cotton were destined to do away with the complaints against the condition of our cotton upon arrival in foreign warehouses.

The process of packing consists in pressing the lint cotton into a thin layer, which is subsequently rolled by special machinery into a cylindrical bale of the desired size. This bale is finally completely enveloped in closely woven Hessian cloth.

The advantages of this method of packing are evident and manifold. The covering insures the preservation of the cotton and prevents any loss by handling. All marks and numbers are likewise well preserved; thus one of the chief difficulties of the cotton trade, the fraudulent substitution of bales en route, is entirely obviated. Owing to the regular form, greater density, and smaller dimension, these bales are also much more easily handled, packed, and reshipped. They are almost entirely fire and water proof, a fact which should reduce the rate of insurance. For a given quantity of raw cotton, they are naturally much smaller in volume than the old-fashioned bales. I am also told that the suppression of the iron bands reduces the tare from 6 per cent to 1 per cent.

At Ghent and in other cotton-manufacturing districts of Belgium, as in many other European countries, the round bale has been introduced. After due trial, spinners generally agree that this method of packing evinces progress, and that it is destined to increase the export trade in American cotton.

HENRY C. MORRIS,
Consul.

GHENT, *June 2, 1898.*

THE FOREIGN TRADE OF AUSTRIA-HUNGARY.

The total value of the imports of Austria-Hungary (exclusive of precious metals) amounted during the calendar year 1897 to 760,300,000 florins ($308,680,000), and that of the exports to 773,400,000 florins ($314,000,000). The balance of the trade in favor of the

Monarchy was therefore 13,100,000 florins ($5,318,600), a loss of 55,000,000 florins ($22,330,000) as compared with 1896.

The following tables show the value of the principal commodities imported and exported in 1896 and 1897:

Imports.

Articles.	1896.	1897.	Increase.	Decrease.
	Florins.	*Florins.*	*Florins.*	*Florins.*
Coffee, tea, and cocoa	35,200,000	30,000,000	.....	5,200,000
Grain	11,700,000	39,800,000	28,100,000	.....
Fat and grease	9,000,000	14,100,000	5,100,000	.....
Wine	11,800,000	18,000,000	6,200,000	.....
Coal and coke	36,600,000	36,300,000	.....	300,000
Cotton	51,400,000	51,500,000	100,000	.....
Cotton yarn	13,500,000	11,500,000	.....	2,000,000
Flax, hemp, and jute	16,800,000	19,700,000	2,900,000	.....
Wool	40,800,000	38,800,000	.....	200,000
Silk and silk goods	32,700,000	33,700,000	1,000,000	.....
Iron and ironware	18,400,000	19,000,000	600,000	.....
Machines, etc	21,300,000	19,600,000	.....	1,700,000

Exports.

Articles.	1896.	1897.	Increase.	Decrease.
	Florins.	*Florins.*	*Florins.*	*Florins.*
Sugar	75,100,000	61,700,000	.....	13,400,000
Grain	42,000,000	37,900,000	.....	4,100,000
Live stock	46,900,000	46,800,000	.....	100,000
Animal products	69,600,000	72,600,000	3,000,000	.....
Beverages	19,100,000	19,800,000	700,000	.....
Timber	72,800,000	82,500,000	9,700,000	.....
Coal and coke	30,900,000	34,500,000	3,600,000	.....
Cotton goods	6,800,000	7,200,000	400,000	.....
Linen goods	7,000,000	7,200,000	200,000	.....
Woolen goods	18,600,000	18,700,000	100,000	.....
Paper, paper goods, etc	17,900,000	18,200,000	300,000	.....
Leather goods	39,300,000	37,500,000	.....	1,800,000
Glass and glassware	24,400,000	23,000,000	.....	1,400,000
Iron and ironware	13,300,000	12,800,000	.....	500,000

The value of raw products imported in 1897 was 430,000,000 florins ($174,580,000), or 40,000,000 florins more than the year previous; and that of manufactured products was 219,000,000 florins, or 15,000,000 florins more than the year previous. The value of partly manufactured products was the same in 1897 as in 1896, viz, 110,000,000 florins.

The raw material exported by Austria-Hungary represented a value of 318,000,000 florins in 1896 and 321,000,000 in 1897. There was also an increase in the value of the partly manufactured products imported, from 103,000,000 florins in 1896 to 114,000,000 florins in 1897. But the declared exports of manufactured products show

a noteworthy decrease—from 352,000,000 florins in 1896 to 338,000,000 florins in 1897.

That the manufacturing industry of Austria-Hungary (or rather that of Austria, for Hungary has always been solely an agricultural State) is losing ground, there can be no doubt. There are many causes which combine to bring about this result. Among the principal ones may be mentioned the following:

(1) The conservatism of the people. While the English and German manufacturers are largely cosmopolitan, the Austrian remains provincial and strongly conservative. Innovations are still painful to him. He accordingly fails to keep abreast of the times and is distanced in the race for industrial and commercial supremacy.

(2) High railroad rates. This is a mountainous country; the construction, as well as the operation, of railroads is expensive, and rates are correspondingly high. Austria's manufacturing centers, lying in the very heart of the European continent, are favorably situated with respect to inland traffic, but are at a great disadvantage in export trade. Moreover, while Austria furnishes Germany with a great deal of through traffic, and thus lowers the general cost of transportation in the latter country, she receives very little through freight from Germany in return.

(3) There is a lack of mechanical skill in the southern and eastern portions of the Monarchy, and, as such skill is largely the product of evolution, manufacturers have found that they can not afford to train a race to the manual arts.

(4) High taxes. It is said that industrial enterprises are taxed more heavily in Austria than in Germany; and, as capital, like water, always follows the course of least resistance, it is not strange that movable plants occasionally cross the frontier.

(5) Internal dissentions. Much of the energy of Austria which might be used in the development of her industries and foreign commerce seems to be consumed in race animosities at home. While in the German Empire we find new industrial and export associations daily springing into life, the people of Austria seem to be absorbed just now in founding German, Slavic, or Italian clubs. Moreover, in the industrial centers of Bohemia, there is constant friction between the German manufacturer and his Slavic workmen, greatly impairing the efficiency of both.

There is now a movement on foot in Hungary to bring about her "economic emancipation" from Austria. It must be remembered that since the "Ausgleich" of 1867 the tariff union of the two halves of the Monarchy rests only upon the precarious foundation of a treaty. Should the Hungarians refuse to continue the present arrangement, Austria's industries would doubtless sustain a terrible

loss, and many now flourishing establishments would be crushed. The agricultural products of Hungary would in a measure have to find a new market, and the industrial interests of the two countries would probably suffer.

FREDK. W. HOSSFELD,
TRIESTE, *June 23, 1898.* *Consul.*

POTATO FLOUR IN AUSTRIA.

This article is a novelty to the average American. It is used as an ingredient in many lines of bakery and confectionery work where we employ wheat flour; and as cornstarch is unknown here, potato flour serves in cases where the former would be used in the United States.

Potato flour makes a beautifully white and light cake, and is better than cornstarch in lines where this would be used, because of the absence of the peculiar taste.

Potato flour is cheaper than wheat flour. It sells in the market here at 18 to 20 florins per 100 kilograms (about $3.50 per 100 pounds), while the price of wheat flour is 28 florins per 100 kilograms (about $5 per 100 pounds). It is also cheaper than cornstarch would be if sold in this market, as the duty would make the price of the latter materially greater than it is in the United States, to say nothing of the added expense of freight.

I presume there is no material difference between the ordinary process of extracting the starch from vegetable substances and that used in this country in making potato flour. The potatoes, after being washed, are placed on rapidly rotating machines set with teeth, and are then crushed in such manner that the starch is separated from the cells which contain it. Water is freely used in this process, sweeping away the extracted starch and carrying it into vessels, to the bottom of which it settles. The starch is then put through a refining process, to remove all foreign particles and to thoroughly cleanse it. The final step is to dry the starch, usually in a special drying machine.

The analysis of potato flour furnished to me is as follows, excluding water, which, of course, is a considerable element:

	Per cent.
Pure starch flour	98.98
Mineral substances	0.4
Albumen	0.28
Starch covers, etc.	0.34
	100

What is left of the potatoes after the starch is extracted is fed to cattle and swine, and is said to be available also for sundry uses in distilleries, breweries, and sugar factories.

FRANK W. MAHIN,
Consul.

REICHENBERG, *June 21, 1898.*

DUTIES ON SODIUM ACETATE AND CALCIUM ACETATE IN THE NETHERLANDS.

By royal order of June 20, 1898, appearing in a recent edition of the Netherlands Gazette, sodium acetate and calcium acetate destined for dyeing purposes and printing of materials is, under certain restrictions, exempted from import dues in the Netherlands. I send translation of the royal order setting forth the provisions made with regard to this matter.

STANFORD NEWEL,
Minister.

THE HAGUE, *July 9, 1898.*

[Translation.]

ROYAL ORDER OF JUNE 20, 1898, CONTAINING PROVISIONS WITH REGARD TO THE EXEMPTION FROM CUSTOMS OF SODIUM ACETATE AND CALCIUM ACETATE.

ARTICLE 1. The royal order of May 12, 1889 (Official Gazette No. 64), being withdrawn, exemption from customs is accorded to sodium acetate and calcium acetate required in operations in dyeing establishments and in the printing of stuffs, provided those acetates, by mixture with one or more other materials, are rendered incapable of affording vinegar for domestic purposes, and further under the following conditions:

ART. 2. Anyone desiring exemption from customs shall address himself to the Minister of Finance, state the community in which the factory is situated, the surveyor's plan and number thereof, the sort of acetate to be imported, and the quantity which it is thought will be consumed annually. The minister shall determine the quantity that shall be annually imported free of duty, the minimum quantity to be imported in each case, as also the materials with which, and the proportion in which, the acetate shall be mixed.

ART. 3. When acetate for which exemption from duty is requested is imported, mention shall be made of the request in the declaration referred to in article 120 of the general law of August 26, 1822 (Official Gazette No. 38). After this declaration has been made and security for the customs duty deposited, a license shall be given, in which also mention is made of the request. The removal of the acetate to the factory shall be effected under seal.

ART. 4. Admission to the factory shall take place under the supervision of the customs officials, in whose presence the acetate shall immediately be mixed in a proper manner with the materials prescribed by the Minister of Finance. The officials shall enter a statement upon the license with regard to the quantity admitted and the mixing. The materials required for the mixing shall be supplied by the

collector in whose district the factory is situated, at the expense of the person enjoying the exemption, unless some other manner is determined upon by the minister.

ART. 5. The mixture shall not be removed from the factory, and, except with the special consent of the minister, shall not be subjected to distillation.

ART. 6. The collector in whose district the factory is situated shall keep, with the persons enjoying exemption, an account of the acetate admitted under exemption from customs duty. Whenever more is laid in than the quantity for which exemption is granted during the current year, the license shall not be renewed and the duty demanded of the person who has furnished security.

ART. 7. The person enjoying exemption shall tender a written and signed statement at the collector's office at the end of the year of the quantity of acetate imported free of duty which remains unused at the end of that period. This quantity shall be regarded as the first entry in the succeeding year, and shall be entered as such in the account mentioned in article 6. Until this statem· nt has been made, no additional entries shall be allowed.

ART. 8. The officials are authorized by the collector, within eight days after the end of the year, to certify to the quantity of acetate in stock, no matter whether the statement mentioned in the preceding article has been made or not.

ART. 9. The officials are authorized to take from the acetate declared to be for importation under exemption from duty the samples they shall deem necessary for an investigation. The person interested shall supply the necessary bottles.

ART. 10. The Minister of Finance, in case of evident abuse of the provisions of this order, or attempt thereof, or of nonobservance of the same, may refuse the person interested permission to import acetate under exemption from customs.

ART. 11. This order shall go into effect on the second day after the date of the Official Gazette and the Official Journal in which it is inserted.

The Minister of Finance is charged with the execution of this order, which shall be simultaneously inserted in the Official Gazette and Official Journal and a copy thereof sent to the Council of State.

INCREASE IN POPULATION OF RUSSIA.

The Journal de Debats publishes an article of which the following translation may be of interest:

The peopling of Russia has been a long, slow, and difficult work. At the epoch when southern Europe already had flourishing civilization, scattered bands of savages were still wandering over the Russian plain. It required long centuries for them to agglomerate, to become farmers, and finally to found cities, which an invasion of Asiatic nomads never failed to overturn at the end of a dozen years. How many inhabitants Russia possessed at that time can not be told. The first census presenting any guaranties of exactitude, in 1724, shows 16,000,000 Russians. In 1762, there were 20,000,000. In 1796, chiefly owing to the Polish conquests of Catherine II, the population jumped to 37,000,000. Conquests in Finland and Poland account for the gain of 9,000,000 indicated by the census of 1809. The prodigious increase in the Russian population, due simply to the excess of births over deaths, commenced after this date. Without any important change in the frontiers, the inhabitants in 1857 numbered 67,000,000; in 1858, 74,000,000; in 1885, 108,000,000; the census of January 18, 1897, counted 129,000,000 Russians; and at

present there are fully 130,000,000. The Russian people has more than sextupled since the day when Chappe prophesied its approaching end.

Will this progress continue? There is no reason to believe that it is destined to slacken. Russia is far from the influences which have caused the decline in the birth rate of other European countries. If, indeed, the crudeness of agricultural methods renders the crops of the peasant precarious; if the increase in births diminishes proportionally the shares which the mir, the grand Russian village community, places at the disposal of its members, does not the moujik know where to find new fields? The nineteenth century has seen the colonization of southern Russia; the twentieth century will see that of central Asia and Siberia. It is estimated that the zone—about 63 miles wide—along which the Trans-Siberian Railway runs has the area of central Europe, and that it can feed at least 100,000,000 human beings. When they will exist can be calculated with precision. In 1910 the Russian people will have reached 150,000,000; between 1930 and 1940, 200,000,000; at the end of the twentieth century there will be in all probability 300,000,000 Russians. To enumerate the consequences of this enormous growth would be to imitate Chappe. There is one result, however, which can be surely foreseen; it is the economic and social transformation of Russia.

During centuries, this land has only been an immense collection of villages. An urban life could not develop in a country where the consumers were so scattered, so distant from the centers of production that it was necessary to manufacture on the spot, almost in every village, the necessaries of existence. The principal characteristics of Russian life on which historians and philologists have so much dilated are almost entirely due to this infinite dispersion.

This condition is now about to disappear; the difference in density between the populations of western Europe and of Russia is decreasing every day. It is true that the last census gives to Russia in Europe only 51 inhabitants per square mile, while in France there are 183; in Germany, 235; in England, 316; in Belgium, 518. But it must not be forgotten that to find this average, there have been included immense regions to the north and to the south which still are and will remain deserts. In the habitable districts, a much higher average is attained: 90 to 114 in Muscovy, 181 to 194 in Poland, 194 to 207 in the greater portion of the basin of the Dnieper. The urban population will increase even faster. St. Petersburg has already 1,267,000 souls; Moscow, 988,000; Warsaw, 614,000. After these three capitals appear this year two cities which have developed with almost American rapidity: Odessa with 404,000 inhabitants and Lodz with 314,000. After Lodz comes Riga with 282,000, Kief with 230,000, and twelve other cities with over 100,000 inhabitants; that is, six more than in France. In twenty years the urban population has doubled. Certain cities, like Ekaterinoslav, for example, have doubled in much less time. We exclaim involuntarily at the growth of Berlin; look at the progress of the Russian capitals. St. Petersburg, lost in a desert tract on the northern frontier of the Empire, will perhaps have difficulty to reach 2,000,000. It must soon be surpassed by Moscow, with the advantages of a central situation and an immense railway system.

Along with these economic consequences, will there not be others of another kind?

Certain writers are pleased to dream of the time when Muscovy, Poland, Lithuania, and the Cossack region, liberated from the bonds of St. Petersburg centralism, will form a federation similar to the United States of the Danube, which may some day spring from the present Empire of Austria-Hungary. To these reveries historians and geographers have always replied that the conditions were not the same; that Russia possessed a compact kernel—Muscovy—and the Russian race was sufficiently strong to always maintain authority over the outer countries with their divers people.

Now, the census of 1897 shows that the kernel of the Empire—the great Russian Mesopotamia—is rapidly losing its relative importance. The population there is increasing in a way which would be considered marvelous for a French province, but which is mediocre for Russia. Leaving aside the district of Moscow, which is governed by special conditions; the districts in the neighborhood, Vologda, Kostroma, Orel, and others have each gained in eleven years only from 40,000 to 100,000; that of Kaluga shows a total increase of 5,000 inhabitants.

On the other hand, the provinces of the former Kingdom of Poland have gained 1,500,000 inhabitants.

An almost equal gain is noticeable in the Cossack regions of the Don. Farther south, the districts of the Caucasus have advanced from 7,284,000 to 9,723,000; those of the steppe, between the southern Ural and the Oltaï, from 2,567,000 to 3,415,000; and Turkestan and the trans-Caspian region, from 2,759,000 to 4,175,000.

Siberia gained less than might be believed, barely 1,400,000 inhabitants (from 4,313,000 to 5,731,000), of which more than half were for the single district of Tomsk. The real colonization of Siberia has, however, only begun, as may be judged by the fact that 196,000 immigrants arrived in the first ten months of 1896.

In general, while the population of the districts of central Russia is growing 20 per cent, the outer regions are increasing 40 to 60 per cent. All this does not mean that the great Russian race is in decay. Historic Russia is simply experiencing the results of its good fortune. For two centuries past it has been conquering and pacifying immense regions. Its population is gradually moving thither, as in the United States so many have emigrated from New England to the Mississippi basin. The Oukrainy or conquered regions, formerly immaterial factors, are more and more affecting the destiny of Russia. The center of gravity of the Empire is moving toward the south and the east. It is neither sure nor probable that a general dislocation will result. In any event, the Government of the entire Empire by St. Petersburg becomes every year more and more paradoxical. Willingly or unwillingly, if contact with the enormous new Russia of the south be maintained, the Government must return to Moscow; and, later, when Siberia in its turn shall be colonized, it may be necessary to remove the capital to the east, towards the legendary centers of Tamerlane and Ghengis-Khan, whose heritage Russia is now reaping.

HENRY C. MORRIS,
Consul.

GHENT, *May 9, 1898.*

THE RUSSIAN FAMINE.

The following article on the famine in Russia has been translated from the Novoe Vremia:

The frequent failure of the cereal crop in the same localities in Russia can not be accounted for on any other theory than that the soil is being impoverished. The famine of 1891, as well as the present one, was caused by impoverishment. How can it be otherwise in a region which is over head and ears in debt, and has no means for encouraging rural industry? As is already known, in the central Chernoziom region all the forests have been cut down. This has had unfavorable consequences for the farmers. Then, the changes in the tariff on grain and the low price of cereals, owing to the conditions of the international market, have destroyed the agriculture of that region.

Of course, a poor harvest has always sad results; but if a farmer has reserve supplies, a famine may not ensue. But when such a harvest occurs in a region where the farmer has not enough to eat and is persecuted by all sorts of payments,

when the grain just taken off the field is brought straight to the market and sold at a very low price in order to pay the taxes, even a medium harvest may not be sufficient to avert a famine.

This calamity has this year visited the same localities as the famine of 1891. The whole of the governments of Voronezsh, Kaluga, Kursk, Orel, Penza, Riazan, Samara, Saratov, Simbirsk, Tambov, Tula, and Astrakhan, and some parts of the governments of Nizhni Novgorod, Kazan, Ufa, Perm, Stavropol, and Orenburg, are again stricken, not only with the same distress, but even with a still greater one, as there is also a deficiency of fodder.

The conditions under which this famine first manifested itself were more favorable than those of 1891. The great disaster of this latter famine consisted in the fact that all the public granaries were nearly empty, containing only one-fourth of the amount of grain which should have been kept there; in consequence of which, as soon as the first symptoms of the coming famine were observed, a dreadful panic set in, and was followed by grain speculation. This lesson was very hard, and caused larger quantities of grain to be kept in the granaries, so that when, in 1897, it was ascertained that a famine might be expected, the granaries contained three-fourths of the obligatory supplies—*i. e.*, on January 1, 1897, there were in the granaries of the eighteen governments 68,000,000 poods (1,224,000 tons) of different cereals. These supplies were very beneficial; they prevented panic during the first period of the famine, furnished the seed for sowing the winter fields in all the governments where the crops had failed, and prevented grain speculation. Owing to this fact, the famine in the eighteen governments has had no influence on the prices of grain in the Russian market.

On the other hand, the present famine has occurred under very unfavorable conditions, so far as the public funds are concerned. The local and the general alimentation capitals were spent during the famine of 1891, and the money has been repaid very slowly. Up to the present day, only 8,500,000 rubles ($4,377,500) in grain and money have been distributed to the famished governments from the public fund.

The Red Cross Society, other benevolent institutions, and private persons are doing their utmost to help the needy. A reduced railroad tariff was established on May 7 for grain going to the famished governments. This tariff will continue until September 13. Grain paying this rate has to be accompanied by a certificate from the Russian Red Cross Society.

W. R. HOLLOWAY,
Consul-General.

ST. PETERSBURG, *May 13, 1898.*

PROPOSITION TO PROHIBIT EXPORT OF GRAIN FROM RUSSIA.

A Russian civil engineer, in a recent lecture on the scarcity of grain, urged that measures should be taken to avoid distress. He suggested the prohibition of the export of grain, hay, and straw, as in 1891. Strict measures are more indispensable at the present time than in that year, in the first place, because the principal grain-bearing provinces have had a poor harvest, and, second, on account of the Spanish-American war.

From data collected, it appears that West Europe has now but a small supply of grain in stock, which may last only about a month.

The Government in 1891, continued the lecturer, made an expenditure in aiding the distressed districts of $63,000,000, and also made an extra allowance of $5,000,000 to construct public works and highways, for the sole purpose of giving employment to the workmen. He added that a proposition should be made to the Government to adopt similar measures in this crisis. Roads are needed all over Russia to enable farmers to bring their grain to the railways; in this way thousands would be given employment.

THOMAS SMITH,
Consul.

MOSCOW, *June 2, 1898.*

REDUCTION OF DUTY ON AGRICULTURAL MACHINERY IN RUSSIA.*

During the years 1895–96, the Ministry of Finance and also the Ministry of Agriculture and Crown Domains received applications from several agricultural associations and private persons, interceding for an improvement in economical conditions of the agricultural industry, as the prices of farm products in the international market were rapidly falling. This, they claimed, could be facilitated by reduction of the price of agricultural machinery, implements, and manure. Owing to the present condition of agriculture and of the machine-building industry in Russia, the duty on foreign agricultural machinery, amounting to 35 cents per 36 pounds, is excessive and prevents the general use in Russia of the latest improved implements. The manufacture of agricultural machinery in this country has made considerable progress, owing to the protective tariff, but is still unable to satisfy the requirements of the agricultural industry, as many machines and implements, especially complicated and patented apparatus, are not manufactured in Russia. In view of these facts, the farmers and agricultural associations have requested a material reduction or entire suspension of the duty on such machinery and manure.

Furthermore, in order to assist the home production of wine and enable it to resist the various diseases of the vine and other plants, the Ministry of Agriculture and Crown Domains has considered the question of importing, duty free, chemical products and apparatus to be used for this purpose.

In transmitting the requests to the Ministry of Finance, the Minister of Agriculture said that it would be too much to put all agri-

* See "Changes of customs duties in Russia," CONSULAR REPORTS No. 215 (August, 1898), p. 524.

cultural implements on the free list, but that it would benefit the agricultural classes to remove the duty from implements and machinery not manufactured in Russia.

In view of these recommendations, the Minister of Finance appointed a commission consisting of representatives of the departments of Finance, Agriculture, and Interior, as well as of farmers and manufacturers, to consider the subjects in detail. This resulted in a recommendation that agricultural implements and fertilizing substances be admitted free of duty into Russia, as follows:

(1) Such agricultural machinery and implements as are not produced in Russia, and the production of which requires special technical facilities, or which are patented, and therefore can not be established in the near future, viz: Harvesting and stacking machines, sheaf binders, steam plows, complex thrashing machines with double drums, tedders, horserakes, assorting machines for grass seeds, assorting machines for potatoes, manure spreaders, pulverizers for sprinkling vines and trees, injectors for sprinkling sulphurous carbon under the roots of the vines in order to destroy the phylloxera, uninterrupted grape pressers, centrifugal cream separators and their parts, etc.

(2) Cloth for sheaf binders, stackers, and assorting machines.

(3) Special twine for stackers, made of manila hemp.

This twine formerly paid a duty of 52½ cents per 36 pounds, and the import of it duty free is even more desirable than the import of the stackers or sheaf binders themselves, as these latter, weighing about 1,080 pounds each, paid a duty of $11.25, whereas the 3,600 pounds of twine necessary for the working of the machine during eight years paid a duty of $52.50. But taking into consideration that the manila twine can be also used for other purposes, and that the import of it duty free would be detrimental to the Russian production of twine, especially as trials have been made to produce such twine in Russia from hemp imported from Manila, it was found necessary to limit the duty-free import of said twine to an amount not exceeding 1,080 pounds per machine—*i. e.*, the quantity necessary for the working of the machine during three years.

Further recommendations were made as follows:

Duty on steam locomotives, imported together with thrashing machines and steam plows, to be lowered to 35 cents per 36 pounds.

Duty on reserve parts of agricultural machinery and implements, imported together with the machines, to be lowered to 35 cents per 36 pounds, when the machines imported have also to pay that duty; but when the machinery imported is duty free, then its reserve parts, coming at the same time, are also to pay no duty.

In order to acquaint landowners and manufacturers with the

most recent inventions in that branch of industry, all kinds of new agricultural machinery and implements, imported for experimental stations and museums, to be admitted duty free.

The following products used as manure and for exterminating noxious insects to be imported free of duty: Strassfurt salts, chloride of potassium, sulphate of magnesium, kainite (mixture of chloride of potassium and sulphate of magnesium), saltpeter of Chile, sulphuric acid, copper-arsenic salts, the so-called caterpillar glue, and all other apparatus for the purpose of preventing or destroying the diseases of the vine and fruit trees.

The recommendations have been adopted, and the regulations will come into force for locomotives, agricultural machinery, and parts of same, on September 1–13, 1898. For the other articles mentioned above, the regulations came into force June 6–18, 1898, and will apply to all machinery, implements, and other articles mentioned herein, up to December 18–30, 1903.

W. R. HOLLOWAY,
Consul-General.

ST. PETERSBURG, *June 20, 1898.*

CAST-IRON INDUSTRY OF RUSSIA IN 1897.

According to data received from all the Russian foundries in 1897, 2,053,422 tons of cast iron were melted in Russia during last year—*i. e.*, 459,000 tons more than in 1896. This quantity was divided as follows: At the northern foundries 6,264 tons were melted, 162 tons less than in 1896; at the Ural foundries, 733,878 tons, 95,652 tons more than in 1896; at the Moscow foundries, 186,966 tons, 38,898 tons more than in 1896; at the southern foundries, 831,276 tons, 129,366 tons more than in 1896; at the Polish foundries, 251,820 tons, 10,782 tons more than in 1896; in the southwestern foundries 3,006 tons, 126 tons more than in 1896; and at the Siberian private foundries, 8,892 tons, 1,116 tons more than in 1896.

The import from abroad of cast iron, iron, steel, and machinery increased in 1897 by 2 per cent. The import during the last three years was as follows, in tons:

Description.	1895.	1896.	1897.
Cast iron	145,908	82,656	112,284
Iron and steel	329,922	414,000	437,292
Articles	36,630	49,392	33,012
Machinery and implements	107,370	94,842	81,810

From this table it is seen that, compared with 1896, the import of cast iron has increased in 1897 by 29,268 tons, and of iron and

steel by 23,292 tons; whereas the import of iron and steel articles and of machinery has decreased, the former by 16,380 tons and the latter by 13,032 tons. A careful examination of these figures will show that the import of unwrought iron and steel increases from year to year, and the import of machinery and apparatus decreases. The total import of cast iron was as follows: Cast iron, 112,644 tons; iron, steel, and manufactures of same, 552,114 tons, which would represent 828,162 tons of cast iron, and by adding to this the 112,644 tons mentioned before, the total will amount to 940,806 tons—*i. e.*, 18,000 tons more than in 1896. Consequently Russia required, in 1897, 2,994,228 tons of cast iron in order to supply her home demands.

The following table shows the quantity of cast-iron produced in Russia and the amount consumed during the last five years:

Year.	Quantity of iron produced.	Total consumption of cast iron.*
	Tons.	*Tons.*
1893	1,275,534	1,844,082
1894	1,442,592	2,297,790
1895	1,587,330	2,453,058
1896	1,771,452	2,691,720
1897	2,053,422	2,994,228

* Including cast iron, iron, steel, and articles of same imported from abroad.

The production during the four years from 1893 to 1896 increased about 180,000 tons per annum, and in 1897 it increased 281,970 tons; whereas the consumption increased very irregularly, viz: In 1894 the increase amounted to 453,000 tons; in 1895, 155,268 tons; in 1896, 238,662 tons; in 1897, 302,508 tons. The increase during the four years was 1,149,438 tons, or 62.7 per cent.

W. R. HOLLOWAY,
Consul-General.

ST. PETERSBURG, *June 7, 1898.*

IMPORTS INTO SOUTH AFRICA.

Trade in South Africa has untold possibilities, but one of its obvious features at present is the foothold gained by United States goods. While our trade is mainly in food stuffs, other lines have been rapidly coming to the front, and with proper effort the market can be retained.

In electrical goods and appliances, articles of iron and steel, galvanized iron, steam and water piping, tools, shovels, hoes, forks, silver-plated ware, hardware, furniture, house furnishings, and window glass the trade has held its own during the past year. An

improved demand for drilling and hoisting machinery, as well as for oil gas engines, is noticed. England sent more goods in 1897 than ever before.

The question of freight rates still continues to agitate English shippers. It is urged that they are not on the same footing as Americans and Germans; they live in hope that preferential rates to American shippers may be withdrawn, and action is being taken to effect this.

IMPORTS.

The imports into South Africa in 1897 amounted to $129,150,128.54, divided as follows:

Cape Colony	$87,148,927.08
Natal	29,082,242.54
Delagoa Bay	12,918,958.92

This trade came from the following countries:

Great Britain and possessions	$38,670,362.42
United States	13,151,071.24
Germany	5,122,738.36
Other competing countries	15,745,291.22
Foreign countries not competitive	6,460,665.30
Total	129,150,128.54

TRADE WITH GERMANY.

Germany recognizes the importance of this market, and through her new steamship line and low rates of freight is preparing to foster her trade. She is imitating the United States in goods and methods of packing. To show her trade on the east coast, it can be stated that during January, 1898, out of a total tonnage of 22,496 tons discharged at Delagoa Bay, British ships delivered 8,290 tons, and German, Norwegian, and Swedish ships 11,334 tons. Of this, lumber represents 9,878 tons; railway material, 2,034 tons; coal, 400 tons; and general merchandise, 10,184 tons. Germany is sending to South Africa a monthly Trade and Export Journal, the purpose of which is to make German industry known to the world's markets and to prove its ability to compete with all civilized nations.

TRADE WITH ENGLAND.

British manufacturers exported to South Africa in February, 1897, $3,254,440.96, and in February, 1898, $2,765,689.92. The largest increase was in railroad iron and steel, viz, $183,416.40; woolen and cotton goods and paper also increased. The decrease is shown in machinery and millwork, bar and angle iron, steel wire, beer and ale, hardware, and apparel.

For March the increase is shown as follows:

Articles.	Value.	Articles.	Value.
Mining machinery	$60,784.02	Sewing machine	$3,722.76
Bar and angle iron	16,019.56	Cotton goods	60,011.28
Railroad iron	22,006.08	Woolen and worsted goods	34,355.35
Cast and wrought iron	15,309.00	Boots and shoes	16,645.50
Locomotives	18,983.44	Paper	3,275.64

British manufacturers are calling attention to the attractive advertising of Americans.

TRADE WITH UNITED STATES.

The principal increases in 1897 were:

Articles.	Value.	Articles.	Value.
Flour	$284,659.50	Clocks and watches	$56,317.68
Salted beef	21,199.04	Oils:	
Lard	112,970.70	Mineral	0.07 to 7 p. ct.
Hams	12,519.36	Vegetable	41,606.46
Sugar and molasses	17,024.58	Cotton manufactures	79,685.56
Bicycles and parts	171 p. ct.	Tobacco (raw)	98,630.84
Builders' hardware	15,226.38	Leather goods	21,795.04

Tinned beef decreased to the value of $168,243.48, and agricultural implements, $39,370.86. Other decreases were in sewing machines, hides, bacon, etc. The heavy loss of cattle and crops caused lessened importations of implements, vehicles, etc.

The total imports of merchandise from the United States into Cape Colony in 1897 were:

Articles.	Quantity.	Value.	
Ale and beer, gallons	36,095		
Animals:			
Oxen, number	1		
Donkeys, do	90		
Horses, do	615		
Mules, do	1,234		
Sheep, do	129		
Fowls, do	120		
Antifriction grease, pounds	274,211		
Apparel and slops		£8,562	$41,667
Arms and ammunition:			
Guns—			
Double barrel, number	14		
Single barrel, do	373		
Pistols, do	163		
Caps, percussion, do	198,000		
Cartridges, do	1,098,125		
Gunpowder, pounds	7,076		
Shot (lead), do	75		
Dynamite, do	423,650		
Detonators		3,955	19,247

Articles.	Quantity.	Value.	
Bags.....number..	214,552	.....	.....
Blacking	.....	£61	$297
Brass and copper (sheets).....cwts...	11	.....	.....
Brush ware.....	.....	4,202	20,449
Butter.....pounds...	8,308	.....	.....
Margarin ..... do.....	130,914	.....	.....
Candles .....do.....	154,730	.....	.....
Carriages, carts, and other wheel vehicles	.....	37,968	184,771
Wheelbarrows, bicycles, etc	.....	34,970	170,182
Cheese ....pounds...	13,698	.....	.....
Clocks and watches.....	.....	17,844	86,838
Coffee.....pounds...	160	.....	.....
Composition metals.....cwts...	165	.....	.....
Confectionery and preserves:			
Jams .....pounds...	1,544	.....	.....
Sweets .....do.....	181,849	.....	.....
Cordage .....cwts...	2,223	.....	.....
Corks .....gross...	242	.....	.....
Corn, grain, flour, etc.:			
Barley .....pounds...	510,740	.....	.....
Beans and pease .....do.....	2,169,958	.....	.....
Corn .....do.....	53,993,323	.....	.....
Oats .....do.....	5,535,304	.....	.....
Wheat .....do.....	178,131,801	.....	.....
Samp..... .....do.....	6,755,028	.....	.....
Other grain.....do.....	6,885,856	.....	.....
Bran .....do.....	1,296,887	.....	.....
Flour .....do.....	13,406,842	.....	.....
Corn meal.....do.	10,533,593	.....	.....
Cotton manufactures:			
Piece goods.....	.....	5,701	27,744
Blankets and rugs.....	.....	126	613
Hosiery.....	.....	3,649	17,758
Drugs and chemicals:			
Potash .....pounds...	960	.....	.....
All kinds	.....	20,956	101,982
Earthenware and crockery:			
Brick, fire.....	.....	11	55
Other kinds.....	.....	466	2,267
Eggs .....number...	252,468	.....	.....
Felt	.....	63	307
Fish:			
Dried .....pounds...	3,830	.....	.....
Frozen .....do.....	1,060	.....	.....
Fruit:			
Currants and raisins .....do.....	10,378	.....	.....
Dried, other kinds.....do.....	304,906	.....	.....
Fresh.....	.....	126	613
Furniture	.....	40,481	197,000
Glass:			
Window.....	.....	84	409
Plate	.....	2,821	13,628
Glucose .....pounds...	854,125	.....	.....
Glue .....do.....	805	.....	.....
Haberdashery.....	.....	2,378	11,573
Hardware and cutlery:			
Axel springs.....	.....	1,177	5,728
Wire.....cwts...	73,605	.....	.....
Fencing iron.....	.....	112	545
Unenumerated	.....	62,018	301,811
Hats and caps.....dozen...	183	.....	.....
Hay .....cwts...	4,952	.....	.....
Hops.....do.....	12	.....	.....

Articles.	Quantity.	Value.	
Implements:			
Agricultural		£41,060	$198,818
Tools		15,784	76,813
India rubber:			
Raw		2	10
Manufactured		898	4,370
Instruments:			
Mathematical		123	599
Musical		7,840	38,153
Optical		94	457
Surgical		639	3,110
Iron, bar, bolt, and rod ..... cwts.	8		
Jewelry		2,510	12,215
Lamps		1,769	8,609
Lard ..... pounds.	883,221		
Leather:			
Not manufactured ..... pounds.	220,939		
Boots and shoes ..... dozen.	4,229		
Harness		2,864	13,938
Other kinds		1,618	7,874
Linen manufactures:			
Piece goods		3,061	14,896
Other kinds		377	1,835
Machinery:			
Agricultural, mining, and electrical		271,562	1,321,556
Other kinds		493	2,399
Matches ..... gross.	50,000		
Mats and matting		66	321
Meats:			
Preserved ..... pounds.	2,423,854		
Salted and canned ..... do.	220,544		
Nuts ..... do.	3,455		
Oilman stores		2,658	12,935
Oils:			
Castor ..... gallons.	10		
Fish ..... do.	181		
Lamp ..... do.	2,794,647		
Lard ..... do.	91,374		
Machine ..... do.	137,283		
Unenumerated ..... do.	14,546		
Chemical		267	1,299
Essential		21	104
Painter's colors and turpentine:			
Paints		3,316	16,147
Turpentine ..... gallons.	37,906		
Varnish ..... do.	4,074		
Perfumery		226	1,100
Photographic material		73	355
Plate, silver		14	68
Plated ware		2,327	11,324
Printer's material		786	3,825
Provisions:			
Fish, preserved ..... pounds.	446,945		
Bottled and tinned ..... do.	302,672		
Oil, salad ..... gallons.	603		
Pickles ..... pounds.	237		
Sauces, table ..... do.	1,420		
Vegetables, preserved ..... do.	55,536		
Golden sirup ..... do.	25,925		
Honey ..... do.	3,121		
Maizena ..... do.	269,185		
Milk, canned ..... do.	73,670		

Articles.	Quantity.	Value.	
Provisions—Continued.			
Oatmeal ..... pounds...	1,046,225	.....	.....
Pease ..... do.....	489,520	.....	.....
Other kinds ..... do.....	11,367	.....	.....
Railway material:			
Rails	.....	£6,851	$33,340
Rolling stock	.....	11,305	55,016
Unenumerated	.....	1,741	8,473
Rice ..... pounds...	1,492	.....	.....
Salt ..... do.....	49,465	.....	.....
Saltpeter ..... do.....	600	.....	.....
Seeds:			
Garden	.....	214	1,041
Canary ..... pounds...	1,883	.....	.....
Ship-chandler stores	.....	834	4,059
Soap:			
Common ..... pounds...	62,018	.....	.....
Other ..... do.....	15,379	.....	.....
Spices:			
Nutmegs ..... do.....	84	.....	.....
Pepper ..... do.....	624	.....	.....
Unenumerated ..... do.....	375	.....	.....
Spirits:			
Whisky ..... gallons...	1,103	.....	.....
Mixed ..... do.....	67	.....	.....
Perfumed ..... do.....	227	.....	.....
Stationery and books:			
Books	.....	4,709	22,916
Engravings, photographs	.....	32	155
Maps	.....	449	2,185
Music	.....	46	224
Paper, printing	.....	246	1,197
Typewriters	.....	3,643	17,729
Unenumerated	.....	3,468	16,877
Stearin	.....	1,257	6,117
Steel (bar) ..... cwts...	1,262	.....	.....
Stones, mill	.....	182	883
Sugar:			
Refined, or candy ..... pounds...	316,669	.....	.....
Unrefined ..... do.....	16,696	.....	.....
Tallow ..... do.....	46,488	.....	.....
Tar pitch ..... cwts...	56	.....	.....
Rosin ..... do.....	1,791	.....	.....
Telegraph material	.....	50	243
Tinware	.....	510	2,482
Tobacco ..... pounds...	134,181	.....	.....
Cigars ..... number...	1,050,165	.....	.....
Cigarettes ..... do.....	57,745,400	.....	.....
Other manufactured ..... pounds...	172,418	.....	.....
Pipes	.....	46	224
Toys	.....	669	3,256
Wax, paraffin ..... pounds...	1,165,385	.....	.....
Wine ..... gallons...	124	.....	.....
Wood and timber ..... cubic feet...	391,789	.....	.....
Staves ..... number...	379,474	.....	.....
Planed or grooved ..... cubic feet...	417,598	.....	.....
Manufactured (not furniture)	.....	54,557	265,502
Woolen, manufactured:			
Cloth	.....	768	3,737
Blankets and rugs	.....	280	1,363
Shawls	.....	19	92
Unenumerated	.....	297	1,445

GENERAL REMARKS.

I am surprised at the small imports in fish, particularly cured fish, such as mackerel, salmon, halibut, etc. It would seem that with the large production of glue by the packers of America, we ought to have the bulk of the glue trade. England imported 137,959 pounds, and the raw material must have come largely from the United States. The same applies to candles, of which England sent 4,000,000 pounds and America 175,000 pounds, and to antifriction grease, imports of which from England were five times as large as from America.

In ale and beer, the United Kingdom furnished nearly 60,000 gallons and Germany 200,000.

England sent 6,000,000 percussion caps; the United States only 198,000; in guns and pistols, England sent twenty times more than the United States; in dynamite, England furnished over 4,000,000 pounds and the United States about 2,000,000.

England supplied nearly 10,000 gallons of cider; America, with its large apple crops, none.

England furnished all the malt. How much of this was made from barley sent from the United States? The United States supplies the world in raw cotton, yet other countries furnish the piece goods. Of wire fencing, produced so largely in the United States, England sent twice as much as our country. The United States furnished 800 pounds of bar iron; the United Kingdom nearly 150,000 pounds. Of corrugated and galvanized iron the United States supplied none; the United Kingdom nearly 400,000 pounds.

Bacon and all other salted and cured meats come from the United Kingdom in the ratio of 10 to 1, as compared with the United States; yet the bulk of the raw meat came from the United States and was cured in the United Kingdom.

Silver-plated ware was furnished by the United Kingdom to the value of nearly $180,000, and the United States, the great silver-producing country, sent only about $10,000 worth.

Sheep dip, valued at some $250,000, was furnished by the United Kingdom; none came from the United States.

Three hundred and forty-one thousand six hundred and eighty-seven gallons of whisky came from the United Kingdom; 1,103 gallons from the United States.

The United Kingdom exported 139,217 pounds of manufactured tobacco; the United States, 14,226 pounds.

J. G. STOWE,
Consul-General.

CAPE TOWN, *May 6, 1898.*

COMMERCE OF CAPE COLONY.

Under date of May 23, Consul-General Stowe sends from Cape Town the following statistics:

Articles of merchandise imported into Cape Colony the first three months of 1897 and 1898.

Articles.	1897.		1898.	
Agricultural implements	£37,954	$184,703	£34,301	$166,926
Ale and beer	40,784	198,475	39,895	194,149
Bags (all sorts)	45,382	220,852	16,633	80,944
Books	40,478	196,984	38,977	189,682
Butter	69,251	337,010	55,701	271,179
Candles	22,831	111,107	14,248	69,338
Carriages	105,608	513,941	84,916	413,244
Cement	17,270	84,044	20,955	101,978
Cheese	17,807	86,658	22,719	110,562
Chicory	3,947	19,208	4,239	20,629
Coal	51,576	250,995	59,280	283,615
Coffee	109,764	534,167	78,879	383,865
Corn, grain, meal, and flour	30,216	147,046	17,394	84,648
Oats	11,356	55,264	821	3,995
Wheat	229,845	1,118,541	255,591	1,243,834
Confectionery and cocoa	37,909	184,484	39,492	192,188
Cotton manufactures	403,818	1,965,180	402,141	1,957,019
Drugs and chemicals	84,994	413,623	101,228	492,626
Dynamite	32,380	157,577	44,680	217,435
Earthenware and crockery	30,732	149,557	26,960	131,201
Furniture	153,974	739,314	111,902	544,571
Gunpowder and cartridges	5,944	28,926	3,466	16,187
Guns	22,645	110,182	13,155	64,019
Haberdashery and millinery	431,793	2,101,321	425,350	2,069,966
Hardware and cutlery	347,734	1,702,248	290,695	1,414,667
Hats	35,202	171,310	30,754	149,664
Iron (bar, rod, sheet, corrugated)	57,691	280,753	78,017	379,670
Jewelry (plated ware and clocks)	46,670	227,120	36,371	177,000
Lead (bar, pipe, sheet)	4,896	23,826	9,713	47,268
Leather goods (boots and shoes)	222,702	983,779	194,858	948,247
Linen manufactures	24,220	117,867	13,785	67,085
Machinery (all kinds)	533,915	2,591,797	352,109	1,713,648
Meats (salt and preserved)	66,389	323,182	68,225	342,016
Oil, mineral	18,951	92,225	15,341	74,657
Paints, colors, and varnish	26,035	126,699	22,700	110,470
Pipes (iron and earthen)	24,281	118,163	65,921	320,805
Provisions and oilman stores	192,575	837,166	198,848	967,694
Rice	40,961	199,337	27,921	135,878
Saddlery and harness	42,948	209,006	22,441	109,209
Soap (common, etc.)	25,303	123,137	31,482	153,207
Spirits (all sorts)	113,858	554,090	42,808	208,325
Stationery and printing paper	99,791	485,633	90,616	440,983
Sugar:				
Not refined	128,538	615,530	117,447	571,556
Candy or refined	18,868	91,821	17,966	87,432
Tea	16,283	79,043	24,156	117,552
Tobacco:				
Unmanufactured	5,078	24,712	1,248	6,073
Cigars	44,575	216,924	19,054	92,726
Other kinds	53,496	262,338	28,729	139,910
Wire	34,826	169,481	18,726	91,130

Articles of merchandise imported into Cape Colony, etc.—Continued.

Articles.	1897.		1898.	
Wood:				
Unmanufactured..	£78,765	$383,310	£63,383	$308,853
Planed or grooved	54,516	265,302	43,748	212,900
Manufactured	45,219	220,058	35,654	173,510
Woolen, manufactured	182,134	886,355	153,121	745,163
Total value	5,850,023	28,469,139	5,148,677	25,056,037
Government articles	570,298	2,775,355	558,220	2,716,578
Total	6,420,321	31,244,492	5,705,897	27,767,748
Specie	33,581	163,422	22,870	111,307

Exports from Cape Colony, January 1 to April 30, 1897 and 1898.

Articles.	1897.		1898.	
Aloes	£517	$2,516	£278	$1,352
Argol	912	4,438	1,248	6,073
Copper ore	117,325	570,962	100,450	488,850
Corn, grain, meal, and barley	16	79	134	652
Beans and pease	4	19	.....	.....
Bran	115	560	2,423	11,792
Flour	2,109	10,263	1,609	7,830
Maize	9	42	13	63
Oats	3,431	16,697	3,191	15,529
Wheat	132	642	143	696
Diamonds	1,585,337	7,715,043	1,456,235	7,086,768
Feathers (ostrich)	174,235	847,915	235,834	1,147,686
Fish (salted)	2,244	10,920	831	4,044
Flowers (dried)	2,634	12,818	1,288	6,268
Fruits:				
Dried	136	662	49	238
Fresh	6,718	32,693	5,007	24,367
Gold	3,131,633	15,240,092	4,657,914	22,667,738
Hair, angora	40,554	197,356	24,689	120,149
Hides	30,670	149,255	141,945	690,775
Horns	2,532	12,322	4,962	24,148
Horses	.....	.....	30	146
Ivory	132	642	278	1,353
Skins:				
Goat	23,204	112,922	33,138	161,266
Sheep	60,440	294,131	73,900	359,633
Spirits (all sorts)	1,644	8,001	2,204	10,726
Wines	5,668	27,583	5,077	24,687
Wool (all kinds)	549,205	2,672,706	854,276	4,157,334
Total value	5,759,094	28,026,631	7,640,294	37,181,491
Value imported goods reexported	85,260	414,918	98,729	480,465
Total	5,844,354	28,441,549	7,739,623	37,664,875
Specie	403,866	1,965,414	178,487	868,607

Exports of wool from principal South African ports.

Port.	1896.	1897.
	Pounds.	*Pounds.*
Durban	25,537,963	21,743,155
East London	27,009,796	22,716,062
Port Elizabeth	37,718,815	31,334,883
Cape Town	7,287,439	5,029,227
Total	97,554,013	80,823,327

On June 4, 1898, the consul-general adds:

I forward lists of current prices on goods and merchandise, such as are exported from South Africa to the United States, May 12, 1898.

Current prices for ostrich feathers, per pound.

Quality.	Price.	
	£ s. d. to £ s. d.	
Primes, good to superfine	8 0 0 to 11 0 0	$38.93 to $53.53
Whites:		
Firsts	6 0 0 to 7 10 0	29.20 to 36.50
Seconds	5 0 0 to 5 10 0	24.33 to 26.77
Thirds	2 15 0 to 4 5 0	13.38 to 20.68
Feminas:		
Tipped and grays	5 0 0 to 6 15 0	24.33 to 32.75
Seconds	3 0 0 to 4 10 0	14.60 to 21.90
Thirds	1 15 0 to 3 5 0	8.52 to 16.82
Fancy	5 0 0 to 6 5 0	24.33 to 30.42
Tails:		
White	2 5 0 to 2 8 0	10.95 to 11.68
Light	2 0 0 to 2 6 0	9.73 to 11.19
Colored and dark	1 2 6 to 1 15 0	5.47 to 8.52
Blacks:		
Long	4 15 0 to 6 15 0	23.12 to 32.85
Medium	3 10 0 to 4 10 0	17.03 to 21.90
Short	1 5 0 to 2 0 0	6.08 to 9.73
Floss	0 13 0 to 1 12 6	3.16 to 7.91
Drabs:		
Long	3 2 6 to 4 0 0	15.21 to 19.47
Medium	2 0 0 to 3 0 0	9.73 to 14.60
Short	0 7 6 to 0 15 0	1.82 to 3.65
Floss	0 10 0 to 1 12 6	2.43 to 7.91
Spanonas:		
Light	1 15 0 to 2 15 0	8.52 to 13.38
Dark	0 15 0 to 1 15 0	3.65 to 8.52
Chicks	0 2 0 to 0 5 0	.49 to 1.22
Snow-white:		
Extra superior	0 0 13½ to 0 0 14	.27,3 to .28,3
Superior	0 0 12½ to 0 0 13	.25,3 to .26,3
Good to superior	0 0 11½ to 0 0 12	.23,3 to .24,3
Inferior, faulty	0 0 10½ to 0 0 11	.21,2 to .22,2
Grease, superior, long:		
Well condition, Grassveld grown	0 0 6 to 0 0 6½	.12,1 to .13,1
Karoo grown	0 0 5¼ to 0 0 5½	.10,6 to .11,1
Mixed veld	0 0 5¼ to 0 0 5¾	.10,6 to .11,6
Grease, light, faultless:		
Medium grown Grassveld	0 0 5¼ to 0 0 5½	.10,6 to .11,1
Karoo	0 0 4¼ to 0 0 5	.09,6 to .10,1

Current prices for ostrich feathers, per pound—Continued.

Quality.	Price.	
Grease:	£ s. d. £ s. d.	
Short, faulty, and wasty	o o 3½ to o o 4½	$0.07,1 to $0.09,1
Coarse and colored	o o 3 to o o 3¼	.06 to .06,5
Scoured, coarse, and colored	o o 5½ to o o 8½	.11,1 to .17,2
Free State Grassveld grease:		
Long and well-conditioned	o o 5 to o o 5½	.10,1 to .11,1
Short, light, with little fault	o o 4¾ to o o 5	.09,6 to .10,1
Karoo grown, long and well-conditioned	o o 4¾ to o o 5	.09,6 to .10,1
Free State, conditioned:		
Short, faulty, and wasty	o o 4¼ to o o 4½	.08,6 to .09,1
Short, light, with little fault	o o 4½ to o o 4¼	.09,1 to .09,6
Short, faulty, and wasty	o o 4 to o o 4½	.08,1 to .09,1

Current prices for mohair, per pound.

Quality.	Price.	
	s. d. s. d.	
Kids, superfine	1 3 to 1 5	$0.30,4 to $0.34,4
Superior clips	1 0 to 1 1½	.24,3 to .37,8
Ordinary good clips	o 11½ to 1 o	.23,3 to .24,3
Mixed unsorted clips	10 10 to o 11	2.64 to .22,2
Long blue Free State hair	1 o to 1 1	.24,3 to .26,3
Mixed Free State hair	o 10 to o 11	.20,2 to .22,2
Seconds and gray	o 8 to o 10	.16,2 to .20,2
Thirds	o 4¾ to o 5	.09,6 to .10,1
Winter	o 10 to 6 11	.20,2 to 1.70,2
Winter kids	1 1 to 1 o	.26,3 to .24,3

Current prices for skins.

Description.		Price.	
		Pence.	*Cents.*
Capes	each	15	30.4
Damaged	do	4	8
Goatskins	do	9¾	19.7
Damaged	do	3½	7
Angora skins	do	4⅞	9.1
Shorn	do	4	8
Damaged	per pound	1½	3

Current prices for hides.

Description.		Price.	
		Pence.	*Cents.*
Damaged	per pound	4½	9.1
Dry salted (special lots)	do	5½	11.1
Ordinary dry salted	do	5¼	10.6

COMMERCE OF NATAL.

Under date of May 28, Consul-General Stowe writes from Cape Town:

The revenue of Natal in 1897 was £2,213,074 ($10,769,925); expenditure, £1,624,998 ($7,908,033). The value of the imports was £5,983,589 ($29,119,136), against £5,437,862 ($26,463,355) in 1896. There was an increase during the year in imports of liquor, tobacco, etc., as follows: Ale and beer, 28,533 gallons; whisky, 4,000 gallons; manufactured tobacco, 25,600 pounds; cigars, 2,400 pounds. Imports from Australia decreased 50 per cent, chiefly in flour. Details of some of the imports for the past two years are:

Articles.	1897.	1896.
Flour.....pounds...	35,741,208	47,298,962
Corn.....cwts...	1,219,317	553,752
Sugar.....do.....	46,146	6,807
Tea.....pounds...	700,000	643,000

The value of the goods sent in transit to other countries was:

Countries.	1897.		1896.	
South African Republic	£553,915	$2,695,627	£565,547	$2,752,234
Orange Free State	27,303	132,860	30,369	147,791
Griqualand, East	6,771	32,951	7,350	35,769
Pondoland	2,297	11,178	2,142	10,424
Bassutoland	770	3,747	1,406	6,842
Mashowaland	13	63	42	204
Total	591,069	2,876,426	606,856	2,953,264

The exports in the last two years were:

Description.	1897.		1896.	
Colonial	£727,294	$3,539,376	£849,108	$4,132,184
Noncolonial	303,569	1,477,319	329,411	1,603,079
Transit	591,069	2,876,437	606,856	2,953,264
Total	1,621,932	7,893,132	1,785,375	8,688,527

The decrease in the value of colonial products exported was due to the rinderpest, locusts, and drought. Wool alone shows a decrease in value of £116,000 ($564,514).

IMPORTS OF NATAL.

The following statistics of the import trade were transmitted by Mr. Stowe under date of May 23, 1898:

Countries.	1896.	1897.
United Kingdom	$17,628,278	$20,305,549
Australasia	660,277	329,623
Asia	1,215,749	924,566
North America	3,279,988	3,182,637
South America	563,896	537,388
Continent of Europe	2,671,145	3,315,635
Cape ports and from the interior	327,569	305,893
East coast and Mauritius	116,591	217,912
Total	26,463,453	29,087,285

NATAL RAILWAYS.

Mr. Stowe says, on May 24:

The total railway receipts for 1897 were £1,051,359 ($5,116,439). Fifteen years ago the revenue was £163,842 ($797,337). The total expenditure for 1897 was £583,088 ($2,837,588).

The number of passengers carried in 1897 was 1,030,171; in 1896, 898,249. The tonnage in 1897 amounted to 686,030; in 1896, to 628,729. The principal increase in tonnage is shown in colonial produce—from 86,628 tons in 1896 to 102,814 tons in 1897.

PROPOSED TARIFF CHANGES IN CAPE COLONY.

I submit a list of articles on which it is proposed to change the customs duties in Cape Colony. The resolution is before Parliament, but is not yet a law.

Articles.	Proposed rate.		Present rate.	
	£ s. d.		£ s. d.	
Animals:				
Mules and geldings.....each...	1 10 0	$7.29	*1 0 0	$4.86
Sheep and cattle for slaughter.....do.....	0 5 0	1.21	.....	.....
Bicycles, tricyles, and velocipedes (including accessories), per 100 pounds.....	12 10 0	60.83	9 0 0	43.79
Coals, coke, and patent fuel.....per ton of 2,000 pounds...	0 3 0	.72,9	0 2 0	.48,6
Millet in grain.....per 100 pounds...	0 2 0	.48,6		
Barley, maize, millet, rye, wheat, beans, and pease (crushed, flaked, ground, malted, pearled, split, or otherwise prepared, except bran)‡ .....per 100 pounds...	0 2 0	.48,6	(†)	

* Mules; others free.

† Duty not changed on raw, and decreased on ground from 5s. (($1.21,6).

‡ This will not include flour, wheaten, wheaten millet, or pollard.

Articles.	Proposed rate.		Present rate.	
	£ s. d.		£ s. d.	
Fodder (namely, chaff, hay, lucerne, oat hay, and fodder not otherwise described, but not including bran), per 100 pounds	0 1 6	$0.36,4	0 2 0	$0.48,6
Oils, anthracite, brick, coal or gas tar, cocoanut, cotton seed, hemp seed, palm shale and any other kinds, if in a crude and unrefined state for making antifriction grease, candles or soap, or burning as fuel in oil engines, not including fish oils when in vessels, and not less than one imperial quart ....per imperial gallon...	0 0 3	.06	10 per ct.	.....
Oils in vessels of less than one imperial quart, not being essential, perfumed, or fish oils.....per 100 gallons...	7 10 0	36.49,8	20 per ct.	.....
Glucose .....per 100 pounds...	0 3 6	.85,1	0 5 0	1.21,6
Substitutes for tallow.....do.....	0 4 2	1.01,3	.....	.....
Tea .....per pound...	0 0 6	.12,1	0 0 4	.08,1
Tamarinds.....do.....	0 0 2	.04	0 0 1	.02
Goorak, or gooracco, and hookah mixtures and ornamentations or substitutes.....per pound...	0 0 6	.12,1	.....	.....
Onions, not pressed.....do.....	0 1 6	.36,4	9 per ct.	.....
Wine, exceeding 2 per cent, but not more than 50 per cent of proof spirit (other than claret not exceeding 20 per cent of proof spirit), not in wood.....per 100 gallons...	7 10 0	36.49,8	*0 8 6	2.06,8
Wine, exceeding 2 per cent, but not more than 50 per cent of proof spirit (other than claret not exceeding 20 per cent of proof spirit), not in wood.....per imperial gallon...	0 9 0	2.18,9	*0 8 6	2.06,8
Wine, exceeding 2 per cent, but not more than 50 per cent of proof spirit (other than claret not exceeding 20 per cent of proof spirit), in wood.....per imperial gallon...	0 9 0	2.18,9	0 8 6	2.06,8
Felt, unmanufactured.....per 100 pounds...	7 10 0	36.49,8	.....	.....
Down piping and guttering, or cocks and taps.....do.....	7 10 0	36.49,8	.....	.....
Blankets and sheets, or rugs, cotton or woolen, etc., manufactures of cotton and wool, commonly used as cotton or woolen blankets or rugs, the single articles in pairs or the piece, and coats, jackets, or other apparel made of blankets or baize.....per 100 pounds...	20 0 0	97.33	9 per ct.	.....
Medicinal preparations (not being drugs) for dispensing purposes which, under the present tariff, do not fall under the heading of "patent and proprietary chemicals, drugs, or medicines, and of medicated foods," per 100 pounds	20 0 0	97.33	.....	.....
Dyes .....per 100 pounds...	20 0 0	97.33	.....	.....
Shawls.....do.....	20 0 0	97,33	9 per ct.	.....

*And 10 per cent.

J. G. STOWE,
Consul-General.

CAPE TOWN, *May 24, 1898.*

AMERICAN VINES IN SOUTH AFRICA.

I submit herewith a publication from the government of the Cape of Good Hope, Africa, offering a series of prizes for the purpose of encouraging the cultivation of American vines.

J. G. STOWE,
Consul-General.

CAPE TOWN, *June 9, 1898.*

GOVERNMENT NOTICE—PRIZES FOR AMERICAN VINE PLANTATIONS, 1898.

With a view to encourage the cultivation of American vines, the undermentioned prizes are offered by the government for competition during the season of 1898, viz:

CLASS A.—FOR UNGRAFTED OR MOTHER PLANTATIONS.

(1) For plantations of not less than 1,000 vines:

Two prizes, at £15 each	£30
Four prizes, at £10 each	40
	70

(2) For plantations of not less than 500 vines, six prizes, at £5 each 30

Conditions.

Prizes will be awarded with special reference to the suitability and uniformity of the variety of American vine cultivated, and preference will be given to stocks of the following varieties, viz: Riparia Gloire de Montpellier, Rupestris Metallica, Rupestris Monticola, or any other recognized variety of Rupestris.

Plantations must be more or less separated from the main vineyard, so that the situation may satisfy the judges that they have been laid out as bona fide mother plantations. The vines must be planted not less than 5 feet apart each way.

Competition is restricted to vines that have been planted in the season previous to the season of competition.

Entrance fee: 10s. in subdivision (1); 5s. in subdivision (2).

CLASS B.—GRAFTED PLANTATIONS.

(1) For plantations of not less than 6,000 grafts:

Two prizes of £25 each	£50
Four prizes of £15 each	60
	110

(2) For plantations of not less than 4,000 grafts, six prizes of £10 each 60

(3) For plantations of not less than 2,000 grafts, six prizes of £5 each 30

Conditions.

The grafted vines must be planted not less than 4 feet apart each way.

These prizes are open to the following:

(1) Plantations field grafted the same season as entered, on stocks planted out either one or two seasons previously.

(2) Vines grafted in the nursery, either on rooted or plain cuttings, the season previous to competition, and planted out in the field during the season of competition.

(3) Vines grafted either on rooted or plain cuttings and planted out in the season of competition.

Entrance fee: 10s. in subdivision (1); 10s. in subdivision (2); 5s. in subdivision (3).

CLASS C.—GRAFTED VINES IN NURSERIES.

(1) For nurseries of not less than 10,000 grafts, six prizes, at £20 each £120

(2) For nurseries of not less than 5,000 grafts:

Four prizes, at £15 each	60
Two prizes, at £10 each	20
	80

Entrance fee: 10s. in subdivision (1); 5s. in subdivision (2).

The above-mentioned prizes will be awarded according to the following scale of points, viz:

CLASS A.

	Points.
Growth and health	40
Quality and uniformity of variety	25
Cultivation and general attention	20
Extent	10
Distance in planting	5
Total	100

CLASS B.

	Points.
Growth and health	40
Cultivation and general attention	30
Extent	25
Distance in planting	5
Total	100

CLASS C.

	Points.
Percentage of success	35
Treatment and mode of operation	35
Growth and health	15
Extent	15
Total	100

Intending competitors must send in their names to the undersigned not later than December 19, 1898; and the examination of plantations and nurseries will take place about the middle of January, 1899. The judges will notify, where practicable, the date of their visit; but as it may not be possible in some cases for the examination to be carried out on the day specified, it is suggested that competitors who may have occasion to be absent from their farms about the period fixed on by the judges will be good enough to furnish those left in charge of the farm with the necessary particulars regarding the plantations and nurseries required by the judges.

No competitor will be allowed to enter in more than one subdivision of each class.

Cooperative nurseries will not be allowed to enter for prizes in these competitions.

CHARLES CURREY,
Under Secretary for Agriculture.

DEPARTMENT OF AGRICULTURE, CAPE TOWN,
Cape of Good Hope, May 13, 1898.

TRADE OPENINGS IN SOUTH AFRICA.

A number of reports dealing with various lines of imports into South Africa have been received from Consul-General Stowe, of Cape Town. Under date of June 7, 1898, he says:

COLD-STORAGE PLANTS.

It may be of interest to our manufacturers to know that there appears to be no limit to the possibilities of the erection of cold-storage plants in this country. The cities of Cape Town and Port Elizabeth, in Cape Colony; Pretoria and Johannesburg, in the South African Republic; and Durban, in the colony of Natal—all have taken steps to establish local cold storage; but as yet no definite action has been reached.

The loss of so many cattle by the rinderpest is the cause of the movement. It is alleged that thousands of people who at one time would not think of eating frozen meat are now eating the meat imported in cold-storage steamers, and are pleased with it. It must be borne in mind that there may come a time when, with the absence of droughts and other reasons for the depletion of cattle, the country will again be stocked, and the present need of frozen meat will cease.

On May 3, the consul-general writes:

HORSES AND MULES.

The business in horses and mules is at a standstill, for the present at least. When the rinderpest attacked the cattle of this country, the hauling of freight, which had for years been done by oxen, ceased, and it was necessary to find some substitute. Mules, being hardy and not readily affected by the climate, were imported in large numbers, both from the United States and South America. The demand was for mules from 14 to 16 hands high and weighing from 900 to 1,100 pounds. With good weather and care on the voyage, they arrived in fair condition, some of them gaining flesh on the way. They met with a ready sale, bringing from $250 to $300 each; but with increased shipments, prices dropped, competition was keen, and forced auction sales at unremunerative prices resulted.

Transportation to the interior by rail was expensive. Durban is 800 miles from Cape Town by sea; Kimberly, 600 miles by rail, in quite the opposite direction; Johannesburg, 1,000 miles north of Cape Town by rail. In none of these last-named places is the market large enough to take direct shipments, and the reshipment at

Cape Town, with dock charges and the duty of $5 per mule or horse, practically eats up profit.

Another cause, and perhaps the main one, of depression in this line of trade is the financial condition of the farmers and others who need draft animals. The drought, fly, and locust, following the rinderpest, produced in many cases dire distress.

It must be borne in mind that, although this is a very large country, the population is sparse, and our American mules are only fit for city use, where they can be stabled and fed. In this country transport animals have to thrive upon what they can pick up. In Rhodesia and the northern Transvaal, mules and horses die from climatic disease, only donkeys and oxen withstanding it successfully. The colonial farmers also report against the suitability of our mules for their work; hence, outside of the principal cities already mentioned, there is little or no market, and, as traction engines and electric-motor cars are rapidly coming to the front, the demand for horses and mules is decreasing.

With good times, good crops, and a class of farmers who will work and not leave all to the blacks, the demand will again exist.

In Natal, a smaller breed of horses and mules is in demand; these come from South America—a fifteen days' journey, as against five weeks from North America—and are freely sold at prices with which we can not attempt to compete. They also come from a similar climate, where they are handled more or less in the same manner as the native animals of this country.

I would advise those engaged in the horse and mule business in the United States not to make any shipments at present. After this country begins to raise crops, and the mines again produce, no better market for good horses can be found. At this writing, 52 mules and 48 donkeys have just been landed.

The imports for the year 1897 at all ports of South Africa, except Lourenço Marquez, were:

Description.	Total.	From United States.
	Number.	*Number.*
Horses	850	24
Mules	6,584	2,734
Donkeys	9,681	Not stated.

VEHICLES.

Imports of vehicles into South Africa in 1897 through all ports except Lourenço Marquez were valued at $472,804.54, the United States furnishing $355,985.28.

The United States has thus far been prominent in the vehicle trade in this country. Merchants here have in some instances been able to induce our manufacturers to build vehicles that would meet the demand, and in such cases both the merchant and the manufacturer have profited.

The vehicle that has a large sale is known as the four-wheel, four-and-six-seat, extension-top barouche, and is called here the "handy carriage." This vehicle is built on the same lines as the one used in America; it has the same "track," but the seats are made not less than 6 inches wider. The Dutch people of this country want comfort, and, being large themselves, they want room. I inclose cuts of vehicles used in this country.*

The most popular vehicle for passengers, and one manufactured largely in this country, is a four-seat, extension-top, two-wheel cart, known as the "Cape cart," which sells at $400 up; the "cab cart," which has two wheels, two seats, and extension-top, sells for $200 up. The Malays, who do about all the livery business, and the farmers near the town use these carts almost universally. Working drawings can be obtained through this office.

The American buggy of the piano-box style has made some friends and is making more, but they should be constructed so as to be very strong and durable. It seems to me that our park wagons, three-spring wagons, and side-spring road wagons, all with tops, would sell well. Quite a number of regular express wagons with panel sides and canvas top is also sold.

Our manufacturers should meet the demand, and not try to send what is not wanted. The demand here will increase from year to year.

I regret to report, however, that the few wagon and carriage manufacturers of this country are up in arms, and are using every effort to have Parliament enact laws that will place a prohibitive duty on American vehicles. The wagon makers met at Worchester on the 25th of March, and the Paarl Protective Association urged combination, memoralizing Parliament to place a high duty on imported vehicles. A union was formed and a committee appointed to draft a memorial to Parliament, which assembles in May.

King Williamstown, where wagons and carts to the value of $271,693.32 were built in 1896, has also taken action. In 1896, the South African Republic alone imported carts and carriages from different countries as follows:

From—	Carts.	Carriages.
Europe	$105,609.32	$26,384.94
Other countries (United States)	63,373.33	19,498.32

* Filed for reference in the Bureau of Foreign Commerce, Department of State.

The duty on vehicles of all kinds is 20 per cent ad valorem. The duty now desired by the home builders is £20 per vehicle, or $97.20. The duty on a fine vehicle, valued at $1,000, such as they can not build here, is $200; the proposed duty would be $97.20. On an ordinary four-wheel vehicle at a valuation of, say, $100 the present duty is $20 and the proposed duty $97.20, the same as on a high-priced vehicle.

It is obvious that the duty would be prohibitive and would shut out all but the most expensive vehicles. Timber to make parts of vehicles pays a duty of 2 cents per cube of 12 feet; finished wood and iron parts pay a duty of 20 per cent. With no change in duty on these items, it seems conclusive that manufacturers here would make money.

The sale of American-made vehicles is in the hands of resident merchants, who do not desire any change in the duty; certainly the users do not. As all the timber and iron used here in the manufacture of vehicles is imported, I am of the opinion that no change in duty on these items will occur.

Horseless carriages are being introduced for passenger service, and are quite successful.

BICYCLES.

Mr. Stowe says, under date of May 6:

Imports of bicycles and accessories into all ports of South Africa, except that of Lourenço Marquez, for 1897 were:

Country.	Value.		Country.	Value.	
United Kingdom	£244,709	$1,190,876	Germany	£9,665	$47,034
Mauritius	21	102	France	1,542	7,504
New South Wales	59	287	Austria	8	38
Victoria	15	72	United States	35,897	174,692
Belgium	1,051	5,114	Other countries	791	3,849
Denmark	5	24	Total	295,394	1,437,534
Holland	1,631	7,937			

Perhaps no country, in proportion to its white population, does a larger business in bicycles than does South Africa. Here the bicycle is used not only by the whites, but also by the Malays.

Municipal authorities estimate that there are three thousand bicycles in Kimberly, or about one for every seven of the population. The imports from the United States in 1896 were £13,202 ($64,248), and the increase for 1897 is estimated at 171 per cent. All the English makes are sold here, and several American. It is to be

regretted that some very cheap bicycles have been imported from the United States, which has injured the trade. There being a lull in the demand, it was believed that a cheaper machine would find a market; but it was soon found that a cheap machine was not an economical one, and now only the best are in demand.

The duty on bicycles is 9 per cent. They sell here at about the same price as in the United States, with freight and duty added.

The two following reports bear date of May 2:

AGRICULTURAL IMPLEMENTS.

The imports of agricultural implements into the ports of South Africa for 1897 were to the value of $525,827.70, of which United States furnished $295,662.96. The figures speak for themselves. That the United States has much of the trade, and with proper action can retain it, is unquestioned. That the demand will continue to increase can not be doubted.

Although the country has much land that is arid, there are vast tracts of good ground, and the governments are building dams to hold the overflow in the rainy season; artesian wells are also being bored.

Present agricultural conditions are largely due to the fact that farmers here depend entirely upon black labor. American farmers produce more on 160 acres of land than African farmers do on thousands, and in Africa a farmer is not satisfied with less than 1,000 acres. Of this extent he cultivates, say, 20 acres. The grass, that could be used for cattle and sheep when feed is scarce, is not cut. On the acres he cultivates, he raises, say, oats, which are cut straw and all, and for which he finds a ready market.

There should be openings for mowing machines, corn cultivators, grinders and shellers, wheat binders, potato diggers, etc. Africa can raise as good wheat as any other country, and the Government is now buying seed wheat and testing several kinds. A large number of small, cheap plows, both steel and cast, cutting from 7 to 14 inches, have been sold; and there is a demand for a light gang plow, the two small plows held together by an iron frame, with iron handles and no wheels.

The five-tooth cultivator is also in demand. I am of the opinion that hand corn planters, hand seeders, disk harrows, and in time sweep corn grinders, will sell. One dealer said to me that he wanted for immediate delivery 100 feed cutters, and could not get them. Only the cheapest implements are purchased now; but in the future,

when farmers farm as they should, the larger and better ones will find a place.

A few of the manufacturers of the United States have sent representatives, and the bulk of the implements have been sold from catalogue. Samples are worth more than catalogues. Many United States implements should be used here, and would be more efficient and better adapted for the work than those now employed.

Agricultural implements of all kinds are admitted free of duty. In the line of implements, as in all others, the market should be studied with the fact in mind that both England and Germany are good imitators, and that America must do all she can to keep this trade. Durable goods should be made, and, although they may not be expensive and such as are used at home, in time the best will be wanted.

It would pay manufacturers to exhibit at the fairs held here during the months of February, March, and April.

Imports for 1897 fell off $148,366.08 as compared with those of 1896, due to losses through the rinderpest, fly, and drought.

HARNESS.

The imports of harness into South Africa in 1897, with the exception of Natal and Lourenço Marquez, were:

Country.	Value.		Country.	Value.	
United Kingdom	£108,017	$525,664	France	£27	$131
Natal	1,108	5,392	Holland	21	102
New South Wales	65	316	Germany	1,102	5,362
Victoria	22	107	United States	2,864	13,937
Belgium	328	1,596			

For Natal, the total value was £57,906 ($281,789), the countries of origin not being given; but it is estimated that about the same proportion came from the United States as given above.

The United States should do a better business in this line. Samples of harness sent to the United States could be duplicated and again sent here, at a less price than now charged, with a good margin of profit. Pack saddles for mules, head collars with ring, Boer saddles, team harness; barouche, cab, and other harness, if made to meet the demand, would find a market; as well as all kinds of girths, etc.

The harness used here is usually of "russet" color. An ordinary single harness sells at $55 to $75; double harness, $125 to $250; and cart harness is offered as low as $25.

The duty on harness is £9 on every £100 value.

On May 5, Mr. Stowe writes:

LUMBER.

I have the honor to submit, per request, the imports of lumber for 1897:

From—	Unmanufactured.		Manufactured.	
Natal	£173,015	$841,977	£78,041	$397,786
Cape Colony	399,040	1,941,928	130,221	633,720
Orange Free State*	367	1,786	188	914
South African Republic	15,932	77,533	25,820	125,653

* See Cape Colony for balance.

The total was £822,624 ($4,003,299). The United States furnished:

Description.	Value.	
Unmanufactured	£70,321	$342,217
Manufactured	54,567	265,550
Total	124,888	607,767

Timber is a scarce article in this country, and must be imported. Not only boards, sticks, planks, sashes, doors, frames, and moldings, but woodwork partly manufactured, shaped, bent, but not finished, is in demand.

COAL.

Imports of coal into South Africa for 1897 were:

	Tons.
United Kingdom	269,893
New South Wales	85,533
Belgium	753
Germany	56

The coal from the United Kingdom was largely from Cardiff, Wales.

There is plenty of coal in Africa, but thus far it has been mined only on the surface. At deeper levels the quality must improve, but at present the Natal coal has steaming qualities only 20 per cent less than that from Wales. American bituminous coal has no better steaming qualities than the African coal, although, as above stated, only surface coal has thus far been mined.

African coal is to-day worth at the mines $4.25 per ton. There is much difficulty in obtaining experienced labor, and but a small quantity is mined in consequence. Mine owners would be glad to

pay from $2.50 to $3 per day for good workmen, and steady employment would be furnished.

The duty on coal is 50 cents per ton, less a rebate of 5 per cent ad valorem.

Cardiff coal is worth here to-day $20 per ton, owing to the strike in Wales. This figure is only temporary, but coal never can be sold at a price that would be considered reasonable, owing to the long transportation. American soft coal would bring in this market to-day about $8 per ton, but I am not prepared to say at what price it could be laid down here. At all events, American miners would find employment.

GROCERIES AND PROVISIONS IN SOUTH AFRICA.

The following reports have been received from Consul-General Stowe, of Cape Town:

Under date of May 13, 1898, he sends the following list of retail prices in Cape Colony on May 1 for groceries and provisions produced in the United States:

Articles.	Price.	Articles.	Price.
	Cents.		*Cents.*
Apples, dried.....per pound..	24	Ink.....per quart..	72
Apricots, dried.....do...	24	Lard.....per pound..	25
Asparagus.....per can..	42	Mackerel.....do...	30
Bacon.....per pound..	36	Mellin's food.....per bottle..	42
Baking powder (Royal), per half pound..	36	Milk, condensed.....per tin..	30
Barley.....per pound..	24	Mince-meat.....per pound..	36
Beans:		Oatmeal.....do...	10
Dried.....do...	8	Oysters.....per tin..	24
Tinned.....per can..	20	Parffin oil.....per gallon..	42
Butter.....per pound..	56	Pease, dried.....per pound..	6
Celery salt and seed.....per bottle..	24	Peaches, canned.....do...	24
Cheese, cream.....per pound..	30	Prunes.....do...	20
Coffee, Java.....do...	32	Rice.....do...	5
Corn flour.....do...	6	Salmon.....per tin..	24
Corn meal.....do...	6	Salad, mayonnaise.....per bottle..	30
Cream of tartar.....per ounce..	14	Sauce (tomato catchup).....do...	24
Currants.....per pound..	12	Soap (yellow).....per bar..	12
Emery cloth.....per sheet..	3	Soda, washing.....per pound..	24
Enamel paint.....per tin..	30	Soups.....per tin..	32
Extracts of beef.....do...	24	Starch.....per pound..	10
Flavoring extracts.....per bottle..	20	Sugar:	
Flour, self-raising.....per pound..	8	Granulated.....do...	6
Gelatin.....per package..	12	Loaf.....do...	11
Golden sirup.....per pound..	9	Tinned fruits.....per tin..	42
Green corn.....per tin..	24	Tinned tongues.....per pound..	18
Hams.....per pound..	36	Tinned ham.....per tin..	48
Hominy.....do...	6	Tinned chicken.....do...	32
Honey.....do...	24	Tinned tongues.....per pound..	22
Hops.....do...	72	Tomotoes.....per tin (3 pounds)..	30
Horse-radish, prepared.....per bottle..	30		

FLOUR AND CEREALS.

On May 2, Mr. Stowe says:

Imports of flour, wheat, and corn for the year 1897 into all ports of South Africa, with the exception of Lourenço Marquez, were as follows:

Description.	Total imports.	From United States.*
	Pounds.	*Pounds.*
Wheat	192,705,757	183,240,201
Flour	*51,474,873	33,575,058
Corn	112,480,578	68,974,576

*Approximate figures.

The United States has, as can be seen, the great bulk of the trade. Flour is received in bags weighing 200 pounds, or in barrels weighing 196 pounds—the former preferred. The quantity of flour consumed by the white population is the same per capita as in any ordinary community in America. The natives consume but little flour, corn being their principal food of cereal nature.

Most of the flour is made from wheat imported from the United States. There are about fifty mills in South Africa, with an average capacity of fifty barrels per day when in operation. The shipments from the United States have chiefly been via New York and San Francisco. Wheat from Australia would have been largely imported in 1897, if the crops had not failed. South America, only fifteen to sixteen days' voyage, has also sent wheat. Wheat and corn can be grown as well in Africa as elsewhere, if the farmers knew how to farm (see report on agricultural implements*), but it will be many years before this country produces enough for home consumption; hence the supply must be foreign. Flour is worth to-day to the consumer 5 cents per pound; corn meal, 3 cents per pound; bread, per loaf of 4 pounds, 24 cents. With wheat at a lower price, the demand would be larger and imports greater.

Preference is given by the millers to numbers 1 and 2 hard wheat. They do not mix wheat as do our millers in America; this they have yet to learn.

The great bulk of the wheat, flour, and corn imported has been sold through the export commission houses of the United States. At this writing, 2,000 bags of flour have been shipped into the interior, and over 4,000 bags of corn are to be sent to the Transvaal;

**Ante*, p. 97.

three ships loaded with flour and wheat are now due at Delagoa Bay, and one vessel with 2,500 tons of wheat is now unloading at this port—all from Portland, Oreg., and San Francisco, a voyage of eighty days.

England buys our wheat and converts it into flour for this market. Why should we not send this flour direct? Flour with glucose (flourine) will not sell.

There is no stock of wheat in the open market, all going to the mills, and the supplies of American wheat to arrive are at a very high price. Quotations for California wheat in quantity are $7 per sack of 200 pounds. African corn is beginning to come in, and is selling at $2.62 per 100 pounds.

The duty on wheat and corn is 24 cents per 100 pounds, and on flour, $1.25 per 100 pounds. Imports of wheat and corn into South Africa decreased in 1897; flour increased $283,459.50.

The Australian crop this year is reported as being enough for the local demand, with only a small surplus for exportation.

Prices of wheat, flour, and corn are advancing rapidly, owing to the war and the fear that shipments from the United States will be delayed. Wheat has advanced 14 cents per bushel.

EGGS AND BUTTER.

Mr. Stowe adds, on May 2:

The imports of eggs for 1897 through all the ports of South Africa, with the exception of Lourenço Marquez, amounted to 2,650,273, of which the United States furnished 252,468. The United States should have had a larger share. Eggs are selling to-day in Cape Town at 84 cents per dozen, and at higher rates in other parts of South Africa.

The rinderpest, so fatal to the cattle of this country, was supplemented during the past year by diseases among domestic fowls; hence, the scarcity and high price of eggs. The fast mail steamers from England bring eggs from Maderia on each trip south. Packed in baskets filled with salt, they arrive here fresh, although on the steamers they occupy the upper deck and are protected from the sun's rays only by tarpaulins.

Australia is sending a few in the refrigerator steamers that ply between Australian ports and England.

I can not too strongly urge producers of the United States to give attention to this line. It must be understood that not until steamers with cooling chambers are employed can this trade be captured. If Australia can send eggs here, a voyage of thirty-one

days, the United States can surely do the same. Eggs have been imported from our country without cooling chambers, and have arrived fresh, and with care in testing and packing can still be imported. Eggs must be what is known as "candle tested" and packed in clean boxes, with cardboard fillers that have not come into contact with bad eggs or sawdust. A layer of clean straw between each filler would be desirable. Varnishing the eggs has proved the best preservative, but the varnish is at times affected by the damp of the vessel. If requested by buyers here, a sample case should be submitted, forwarded by way of fast steamers to England, and then by fast steamer to this port, in the cooling chambers. An instance has come to my attention where, if one case had been forwarded for sample (which was refused) and the eggs had arrived in good condition, an order for 3,000,000 eggs would have resulted. Americans do not like the idea of sending samples.

The figures of imports represent the minimum of what should be sent here. Owing to the excessive cost to the consumer, the consumption is small. At half the price, or 40 cents per dozen, the sales would be more than trebled.

The duty on eggs is 10 per cent. If this duty is taken off (see report on meats, further on) a reduction of 4 cents per dozen from the present rates would result. Quite a number of crystallized eggs are imported from the United States for pastry, worth $1.08 per pound in the United States; this pound being equal to 50 fresh eggs.

The imports of butter into South Africa for the year 1897, with the exception of the port of Lourenço Marquez, were 4,146,320 pounds, of which about 9,000 pounds came from the United States.

If American producers and shippers had obtained information as to the demands of this country, much loss of trade would have been avoided. Large quantities of butter have been imported from America, but its preparation has been defective, and Danish butter has until recently been the most acceptable.

Butter from America has been colored a too deep yellow, has not been sufficiently worked to extract the milk and water, and has not been packed properly. Both Danish and American butter cross the Equator, but the former, imported principally in tin boxes, will arrive sweeter and retain its flavor longer.

Recently Australian butter has found a ready market, owing to its color and purity, and large quantities are imported. Steamers on their way from Australia to England, where they also deliver butter, can perhaps afford to lessen freight rates. Over 50 tons have just been landed from Australia, and it is arriving by every steamer packed in 56-pound boxes (wood). A choice article, for very long distances, is put up in a square glass box holding 1 or 2 pounds;

around this box is a layer of asbestos, possibly mixed with plaster, which makes the package impervious to heat or dampness.

This butter sells at 50 to 60 cents per pound; while the butter in 56-pound boxes sells, after paying the duty of 6 cents per pound and the freight of 2 cents per pound, at 30 to 40 cents per pound wholesale. I speak only of the choicest quality. The wooden box is first lined with cheese cloth, then with oiled paper, and the butter is packed tight. The box is fastened closely, with wire around each end.

There is no reason why America should not have a share of this large trade, if the butter is properly prepared, colored a pale yellow (if at all), and shipped in steamers fitted with cooling chambers. Australia is thirty-one days by steamer and New York is about the same, and yet steamers from Australia bring butter, beef, and mutton to South Africa, and continue to England, a distance of 7,000 miles from this port, with the route crossing the Equator. It is true that Australian steamers have the advantage of return cargo, which American steamers would not, and liberal concessions are given them by the Government. Owing to the loss of cattle, the demand for butter in this country must continue for years. Shipments from Australia will now fall off and remain few from April to November.

In connection with the importation of butter, eggs, meat, and other perishable products, the local cold-storage facilities should be mentioned. Up to the present, such facilities have been controlled by one company, which owns all the cold-storage plants and refrigerator cars in South Africa, and consequently has been able to control the sale of these products.

If American producers can deliver such products as cheaply as other countries, this company will be their best customer here. I am informed that a company is now being organized for the erection of a large cold-storage plant in this city, and that the Government of the South African Republic has signed a similar contract. This report should be read in connection with that in regard to meats, and American manufacturers of refrigerator and cold-storage plants should take notice.

MEATS.

On May 3, Mr. Stowe writes:

It is reported that over 800,000 cattle have died in South Africa from the disease known as the "rinderpest." The wealth of the native tribes was once in cattle. Taxes were paid with cattle; the breed was fair, the condition was good when not on long journeys, and the meat all that could be expected from "range" or grass-fed stock, besides being cheap.

Sheep are easily kept, the bunch grass of the "karoos" affording, except in case of drought, ample food. The weight per head of cattle when fit for the market ranged from 700 to 900 pounds, dressed. While the disease still exists, it is being rapidly stamped out by the wise and energetic action of the authorities, and inoculation has been the means of saving large numbers. Where once not a pound of beef or mutton was imported, the imports of beef and mutton into South Africa (except through the port of Lourenço Marquez) for the year 1897 were:

Description.	Total imports.	From United States.*
	Pounds.	*Pounds.*
Frozen or chilled	1,991,221	.....
Tinned or canned	6,898,976	4,847,708
Salted or cured	3,356,147	231,590

* Approximate figures.

One of the issues of the recent election was the elimination of the duties on food products. It is feared, however, that the farmer element in Parliament, which is in the majority, will not consent.

Australia and New Zealand have been the largest shippers, and allow me again to repeat what was stated in the report on eggs, that the distance from Australia and New Zealand to this port is not much less than that from New York; yet steamers with cooling chambers reach this port from these countries weekly, discharge part of their cargo, and then proceed to England. Consideration must be given to the fact that all the steamship lines have concessions from the Government, which is of great assistance. Beef packers in America have been of the opinion that the shipment of meat in refrigerator ships, a journey of thirty-two days, would not be possible. They argue that the meat on arrival, when exposed to the air, would deteriorate and "fall to pieces;" and yet Australia and New Zealand send beef and mutton as great a distance, and add seventeen to twenty-four days to reach England, and it is said the meat arrives there in good condition. I know that when it reaches here it is kept in refrigerators for many days, and I consider the quality excellent. South America has also exported much frozen mutton to this country.

Australia and New Zealand are now sending tinned goods, sheep and beef tongues, boiled and roast mutton, rabbits, and even condensed milk. Packers of the United States should have fast refrigerator ships for this market, build their own cold storage here, and send beef that when dressed will weigh from 700 to 900 pounds and mutton weighing from 40 to 50 pounds.

If beef, and even mutton and pork, can be landed here at a price not too much in advance over that charged on goods delivered in England, the market is ours. But it must be borne in mind that Australia feeds 2,500,000 sheep; Tasmania, 1,500,000; New Zealand, 19,000,000; and that 4 cents per pound for mutton is considered a profitable price. While the United States may not be prepared to compete in mutton at present, it can in beef.

The duty on beef and mutton is 2 cents per 100 pounds. Consumers are paying 18 to 24 cents per pound for mutton and beef, the choicest cuts being very much higher.

The following population is to be supplied:

Colonies and Republics.	White.	Colored.
Cape Colony	382,998	1,323,042
Natal	46,788	524,832
Orange Free State	49,950	129,787
South African Republic	113,642	550,000

This does not include the large white and colored population in other parts of South Africa under British, German, and Portuguese protection.

The United States has held the market in tinned meat, but Australia is making rapid encroachments. Imports of tinned and salted or cured meats from England are also of some magnitude, and much of this is of American production shipped to England and there cured and canned. Bacon and ham are also imported from England.

The English people here prefer the English "cure." The meats consumed in this country must be imported, for many years will pass before meat-producing animals will again exist in sufficient quantities to supply the market. I speak of beef alone; sheep were not affected by the rinderpest, and there are over 2,000,000 in South Africa. If some of our raisers of cattle would ship cattle and raise them here, it would be a profitable enterprise.

Since writing the above, word has reached this office that in the Konigha district sickness is ravaging the sheep. To diseased sheep, grass seems to provide no nourishment. The farmers are powerless to stop mortality, and the Government is asked to investigate; one farmer has lost 800 out of 1,400 sheep.

LARD.

The consul-general adds, under date of May 5:

The imports of lard into Cape Colony and Natal for 1896 and 1897 were:

Year.	Total imports.	From United States.
1896	$53,950.64	$45,295.20
1897	92,636.46	72,436.98

The United Kingdom sent the bulk of the remainder, and it is presumed that some portion of those shipments came originally from the United States.

The bulk of the lard from the United States is supplied by only a very few of our producers. It usually comes in tin boxes of from 2 to 20 pounds in weight, and is worth to-day to the consumer 20 cents per pound. I am of the opinion that the substitute known in the United States as cottolene, a product of cotton seed, would find a ready market, provided that it could sell at a price slightly lower than that of lard. The duty on lard is 4 cents per pound.

ALE AND BEER.

The following report bears date of May 12:

Ale and beer were imported into ports of Cape Colony and Natal in 1897 to the amount of 1,312,486 gallons, valued at $767,967.48. Through the same ports, in transit to other countries in the interior, there were sent 54,141 gallons, valued at $44,716.86. Of the imports consumed in Cape Colony and Natal, the United States furnished 64,844 gallons. Of the imports in transit, the United States supplied 28,796 gallons. The English stand first, the Germans second, and United States exporters third. American beer is fast growing in favor with the consumers.

A large amount of beer is made in South Africa, there being about twelve breweries; but it is principally sold to the native trade.

ILLUMINANTS.

Under date of May 11, the consul-general writes:

There were 2,179,272 gallons of kerosene oil imported into South Africa in 1897 through ports of Natal, and 3,388,394 gallons through Cape Colony. This oil is imported in tin cans holding 4 gallons

each, and has been sold to consumers at $1.25 per can. Owing to the war, the price is advancing rapidly, although on December 31, 1897, an unusually large stock was in bond.

On account of the fear that vessels leaving the United States bound for South Africa may be blockaded or stopped on the high seas, merchants are discussing importing from Russia, although freight rates are in excess of those from the United States.

Under usual conditions, this trade is ours. Paraffin wax to the amount of 1,165,385 pounds, stearin to the value of $6,108.02, and tallow to the value of $22,157.90 were also imported in 1897 from the United States. While much of this was used in the manufacture of candles, yet candles to the value of $400,420.21 were also imported from various countries, England furnishing the largest amount, Belgium coming second, and the United States third. The question arises, Did not most of the material to produce candles come originally from the United States?

Eleven candle and soap factories in South Africa must also have produced a large number of candles. At Port Elizabeth (this colony) a syndicate composed of English and American investors has been granted a concession, and is about to build large tanks for the reception of oil (kerosene) for storage. This will obviate the shipment from the United States in tins, as above mentioned, and tank steamers can be used. Most of the oil received at Port Elizabeth is for reshipment to the South African Republic and the Orange Free State.

TRADE CONDITIONS IN MALTA.

In these days of easy and comfortable travel, when so many thousands of Americans cross the Atlantic annually, bent on both business and pleasure, it is remarkable that more do not visit these islands of Malta. To the sightseer, Malta, for a small place, can boast of more interesting things of an historical nature than any other known spot of its size on the earth's surface. As a winter health resort, Malta is an ideal spot, being neither too hot nor too cold.

Malta should be visited by commercial agents. The business men here like to receive well-illustrated catalogues, but the personal appearance of a representative with samples receives far more attention. This is the reason why so many lines of goods of English, German, French, and Austrian manufacture are sold here. Representatives of those nations visit the island, display their samples, explain terms, and leave with fair orders.

High grades of goods are not in demand, but, when once estab-

lished, trade is likely to be steady. In the matter of credit, the business houses here demand time, but in the end are generally satisfactory in the way of payments.

After the Suez Canal was opened, Malta acquired great prominence, both as a port of call and for transshipment. The larger sizes of vessels now being built, the vast improvements made in marine engines, and the rival coaling stations that have in recent years been established at other ports in the Mediterranean have, however, lessened its importance to some extent. Malta could at one time be justly called the Liverpool of the Mediterranean. The Barbary coast and the Levant, as well as neighboring ports of Sicily, drew their supplies from this place. The establishment of direct steamship communication has, however, reversed this order of things, and the general trade of Malta has now to depend on the local demand. Formerly, American sailing vessels were a common sight in Valletta Harbor, and Malta dealt quite extensively in our goods; but now everything of American production has to reach here by way of England or Europe. With the establishment of direct communication with the United States, there is no reason why we should not do quite an extensive business with Malta. American goods are appreciated, but the business man here labors under the disadvantage of not knowing the names and addresses of our manufacturers. This latter defect may be easily remedied by personal visits and catalogues, especially the former.

The population of the Maltese Islands (Malta, Gozo, and Comino) is constantly on the increase. According to present estimates, it reaches 176,231 persons, including a large garrison, but not including the personnel of a powerful naval fleet which Great Britain keeps here.

The trade of a place can best be gauged by statistics, but here we find an almost total absence of the data obtainable elsewhere. Although all goods imported into the islands have to be manifested for customs purposes, such manifests contain only the quantities, and are a mere description of the goods received. The custom-house, however, publishes a monthly return of such dutiable goods as are released from bond and entered for consumption, which are made up of cereals, flour, wine and spirits, beer, cattle, pulse, and other articles.

The islands are mainly agricultural, although not in the sense we would understand the word. They do not produce sufficient wheat to feed the population. At the present time, American grain is almost barred out of the Maltese market on account of the duty, a heavy tax being imposed on grain which reaches here from Russia, India, or America. The duty is assessed upon the measure, and

the Russian article being heavier, the buyer prefers that measure which weighs the most. Were the duty assessed by the weight, we would stand an equal chance.

Russian ports on the Black Sea and Tunis supply Malta with meat. Large quantities of potatoes, cummin seed, fruit, and vegetables are raised in the islands, the first two forming the main exports. There is an excellent opportunity for a development of the lace industry, a little enterprise being all that is necessary. On the Island of Gozo there are several hundred persons engaged in the manufacture of lace, but their work is confined almost wholly to orders from Europe and the local dealers. It seems to me that an American house might establish a valuable connection here and secure a good share of the lace products.

Timber is received in large quantities from Trieste, Fiume, and Venice. It is used for making doors, windows, etc., and for other industrial purposes. The houses are all built of stone quarried here, and are made with many windows, owing to the extremely hot weather during summer. The further uses of timber are for common deal furniture, boxes for oranges and potatoes, and staves. There is a tank depot of petroleum which uses a certain number of boxes.

Condensed milk is imported in large quantities, but mostly of inferior quality. This is used chiefly by the navy stationed here and by residents who have an aversion to goat's milk. The Maltese are, as a rule, prejudiced against condensed milk. About 30,000 goats and sheep are kept on the islands for milking purposes; also some 900 cows. Cows' milk is not generally used, except by English residents. Fresh cheese, which is also used in a dry form, is made from sheep's milk. The sheep are of a peculiar breed and yield large quantities of milk. There are no pastures on the islands, and the feeding of the goats and sheep has to be done by the best means obtainable. Notwithstanding this drawback, the animals thrive.

In 1896, 815,577 English gallons of beer were taken out of bond and paid duty for local consumption. Dutiable articles are supplied to the English war ships and other vessels in bond; consequently no record is kept of the quantity of beer used in this way. The beer is almost entirely English and is principally consumed by the navy and garrison. The Maltese use beer, as a rule, only on holidays, being content with a very cheap red wine, imported from Sicily, on other occasions. There is a local brewery producing stout, but I am told that its yield is not large.

Besides several ice-making machines, which have been established for some time, two large meat-refrigerating establishments, recently installed, are supplying the public with very good ice at the retail

price of 1 cent per Maltese rotolo (about 1¾ English pounds). There are no suitable places for storing natural block ice, and, from conversations I have had with several people who would be most likely to be interested in the matter, I did not perceive any inclination on their part to venture into such a business.

As above stated, the Maltese houses are all built of stone quarried in the islands. They were formerly paved with the same stone, coated with boiled linseed oil to produce a glazed surface, which, however, proved unsatisfactory, not being durable. In the better class of houses and in public buildings, marble slabs imported from Italy were used; but the new houses are all paved with cement tiles manufactured here. There is, however, a fair trade being done in marble blocks and slabs for monumental and other purposes, Italy being the country whence these supplies are drawn.

There is little opening for printing paper. Although several newspapers are published here, their circulation is very limited.

American matches are a rarity at Malta, the cheap Belgian goods, whose only recommendation is their low cost, being almost wholly used. They suit the Maltese, who above almost everything else desire cheapness.

As above stated, in order to introduce any product here, samples should be sent. The facilities for shipping goods to Malta from American ports are not such as to promote American trade, our goods having to pay double freight and incidental expenses at transshipping ports. The question of a regular and direct line to these Mediterranean ports deserves serious consideration. From recent reports, it is believed that Malta will soon have direct communication with the United States, as a new line has been organized, the intention of the company (English) being to have its steamers start from India and sail regularly to New York. Necessarily, these steamers will pass Malta and, should they call here, it is believed it will result in a good market for American goods. For the present, I can see no better way than to send freight to Gibraltar, marked care of the Peninsular and Oriental steamship agent for transshipment to Malta. This route is the most direct, and, I believe, cheaper than by way of England. The steamers of the Peninsular and Oriental Line touch at Gibraltar almost weekly, and sometimes oftener. It takes about three days to go from Gibraltar to Malta.

In conclusion, I would state that it behooves our business men to regain a footing in this market for their goods, beginning the advance work before the direct line is established. I shall always be pleased to give names and addresses of the various business houses here, and those desiring such information have only to write.

JOHN H. GROUT, Jr.,

MALTA, *May 23, 1898.* *Consul.*

Under date of June 15, Consul Grout adds:

Referring to the establishment of the new line of steamers from New York to India, I would say that whether they call at Malta depends upon the encouragement given by our shippers. The market here for American goods is at present somewhat limited, but with the facilities provided by the above line I see no reason why it should not rapidly increase. American merchants seeking increased foreign trade can not well afford to neglect this opportunity. Thus far, I have confined my efforts to calling the attention of Maltese business houses, through the public press, to the desirability of the new line and the opportunity for closer connection with American houses. I inclose a letter recently received by me from the owners of the new line, which, I think, sufficiently explains their position. In answer, I have given them all the information in my power. The Messrs. Gollcher & Sons mentioned is a reliable local firm, which I know is friendly towards American trade. The letter reads as follows:

JOHN H. GROUT, Jr.,
United States Consulate, Malta.

DEAR SIR: We have to acknowledge your letter of the 30th ultimo, and we beg you to accept our thanks for the interest evinced in our new line between New York and India. We carefully note all you have written, and we shall be very glad if we can see any opportunity of promoting business between New York and Malta. There do not appear to have been many inquiries at New York for shipping facilities to Malta; but if there is an important trade to be done, we should like to be made acquainted with all particulars, as it seems to us the business would dovetail very well with our arrangements on the outward voyage from New York to India. We are writing to our agents at New York, Messrs. Norton & Son, 115 Produce Exchange, requesting them to give their attention to this business, but it is probable that shippers in the United States would only operate by our line upon receiving definite instructions to do so from the importers of Malta. You have doubtless in your possession statistics showing the imports of American goods, and we should feel exceedingly obliged if you could furnish us with such particulars, giving description and volume of trade at present between these places. Our direct service to Malta ought to assist in developing such trade, so far as Malta can make use of the commodities exported by the United States. We have to thank you also for speaking on the subject with Messrs. Gollcher & Sons, who are well known to us by name. We shall bear them in mind in the event of our steamers making use of Malta as suggested by you. Before communicating with any firm at Malta in respect of agency for these steamers, we should like to have some further information of the above nature, and we trust you will excuse our troubling you accordingly.

Awaiting the favor of your further news, and repeating our appreciation of your good services, we are, dear sir,

Yours, very faithfully,

BUCKNALL BROTHERS.

BICYCLE TRADE AT MALTA.

The roads of Malta, as a rule, are hard and smooth, and, with the exception of the period from May to November—during which time most of the people who ride wheels are away—are well patronized.

The wheels are chiefly of English manufacture. There are a few American bicycles used, but they have been specially ordered, and their presence is not due to any influence of our manufacturers. American wheels are well regarded, the fact that a wheel is from the United States being sufficient guaranty of its reliability. By a little enterprise it is possible to gain a good market here for our wheels. At the beginning of the season, October 1, people are returning for the winter months, and from that time on there is quite a brisk business done, both in the way of new wheels and in sundries, the assortment of the latter being somewhat limited. There seems to be no disposition to discriminate in the way of nationality of manufacture, and, while English wheels at present hold the market, American wheels are not sold only because the dealers here have not been brought into direct communication with our manufacturers.

It is advisable to select a local dealer as an agent, giving the best of terms in order to encourage him to push the goods. After a market has been secured, arrangements may be made of a more permanent nature.

There are many lines of bicycle sundries that would go well here. I would suggest that, in corresponding, our manufacturers would save time by sending samples, together with illustrated price lists. The price lists are all very well, but with a sample at hand the Maltese dealer knows what he is dealing in, and the purchaser what he is ordering.

In the matter of tires, I would say that the kind most in use is that known as the Dunlop Tropical, an English product, which costs the dealer $15.80 per set, including all charges. I think some of our manufacturers will see a chance for their goods in this direction. Another make of tires used here is known as the "Clincher," which costs the dealer $12.16, including all charges. An Austrian concern has lately been trying to introduce its goods, but thus far has not met with much success, notwithstanding cheapness, owing to inferiority of articles. Malta wants well-made goods, and at as low prices as is consistent, therefore, I would not advise any of our manufacturers to attempt to introduce inferior goods, as it will only have

the effect of damaging the high reputation which American goods now have. Very few single-tube tires are used here. The demand seems to be for rough-tread double tubes. I know of one or two makes at home that would be a success.

The 28-inch wheel seems to be the favorite. Lamps are not much used, but this may be due to the fact that there has been a poor assortment from which to select. Quick-mending kits should find a good market. In the matter of pedals the American article is almost wholly used.

The average retail price at which bicycles are sold here is $50.

Among firms in a position to handle our goods are Melita Cycle Company, 27 Strada Mezzodi, and C. Breed Eynaud & Co., 17 Marina Barriera; the latter make a specialty of American goods of all kinds.

One of the chief obstacles to the increase of American trade at Malta is the lack of direct communication, and it would be advisable for our manufacturers not to rely upon their foreign agents to push their goods at Malta, but to send samples and price lists directly to the Maltese dealers. If a European agent is handling the goods, it would be well to mention his address on the printed matter. The samples and price lists having been examined, it is an easy matter for the dealer to order by agent if he prefers. It seems to me that the present moment, when business is dull at Malta, should be taken advantage of by our manufacturers in making preliminary arrangements for the introduction of their goods.

JOHN H. GROUT, Jr.,
MALTA, *May 31, 1898.* *Consul.*

RAILWAY SUBSIDIES IN BRITISH COLUMBIA.

Consul Smith, of Victoria, under date of June 4, 1898, says:

The provincial legislative assembly of British Columbia adjourned on May 20, having enacted sixty-five laws, of which twenty-one grant charters for building various railroads. The law which will perhaps attract most attention abroad is the "public works loan act," providing for a loan of $5,000,000 for railroad purposes. Half this amount had already been authorized, but was not utilized. Last year a loan of $2,500,000 was authorized, out of which the proposed railways from English Bluff to Boundary Creek, via Penticton, and from Bute Inlet to Quesnelle were to be subsidized, although they had not been built. The present act continues these subsidies and adds $4,000 a mile for a railway from Boundary Creek to Robson, a distance of 80 miles, and a like amount for a railway from the west coast of British Columbia to Teslin Lake, 400 miles. A total of

1,040 miles of new railway is thus subsidized, which will call for $4,160,000.

This important act, which, if carried out, bids fair to open a new era in British Columbia, reads:

1. This act may be cited as the "British Columbia public works loan act (1897) amendment act, 1898."

2. Section 2 of the "British Columbia public works loan act, 1897," is hereby repealed, and the following is substituted therefor:

"2. The lieutenant-governor in council may (in addition to all other moneys authorized to be raised or borrowed by any other act of the province) borrow or raise from time to time, in such amounts, in such manner, and at such times as may be deemed expedient, any sum of money not exceeding $5,000,000 by the sale of debentures, or by the issue and sale of 'British Columbia stock' under the provisions of the 'inscribed stock act, 1891,' or partly in one way and partly in another, or otherwise: Provided, however, that no moneys shall be borrowed under this act before the 1st day of July, 1898."

3. Section 8 of the said act is hereby repealed and the following is substituted therefor:

"8. There is hereby granted for and in aid of the construction of the following railways, subject to the conditions hereinafter contained, and to be paid out of the moneys raised under this act, a sum not exceeding $4,000 for each mile of rail way, viz:

"(*a*) For a standard-gauge railway from Penticton to the Boundary Creek District, approximately 100 miles in length.

"(*b*) For a standard-gauge railway from Robson to the Boundary Creek District, to connect with the railway mentioned in subsection (*a*) hereof, approximately 80 miles.

"(*c*) For a standard-gauge railway from the coast, in the neighborhood of English Bluff, near Point Roberts, via Chilliwhack to Penticton, approximately 230 miles.

"(*d*) For a standard-gauge railway from Bute Inlet to Quesnelle, approximately 230 miles.

"(*e*) For not more than 400 miles of a narrow-gauge railway from Teslin Lake to a seaport in British Columbia, divided by the Stikine River into the northern and southern sections."

4. Section 9 of the said act is hereby repealed and the following is substituted therefor:

"9. The lieutenant-governor in council may enter into all agreements with any person or company undertaking the construction of any railway to which a subsidy is hereby attached, which may be necessary or convenient for the due construction and operation of such railway, which agreements shall in every instance, in addition to other matters therein provided for, contain the following provisions, viz:

"(1) That unless work is commenced on the railway mentioned in subsections (*a*) and (*b*) of section 8 hereof within fifteen months from the 8th day of May, 1897, and on those mentioned in subsections (*c*) and (*d*) of said section 8 within two years from the 8th day of May, 1897, and on each section of the railway mentioned in subsection (*e*) of said section 8 by the 1st day of June, 1898, and is duly and diligently prosecuted to the satisfaction of the lieutenant-governor in council, all right and claim to the aforesaid subsidy granted by this act shall be canceled and forfeited.

"(2) That construction on the railway mentioned in subsection (*a*) of said section 8 be begun and carried on from Penticton.

"(3) That the aforesaid subsidy shall not be payable until the section of railway for which the subsidy is granted is completed and in running order, to the satisfaction of the lieutenant-governor in council, nor until security or guaranties, satisfactory to the lieutenant-governor in council, is or are given for the continuous maintenance and operation of the railway; and no subsidy shall be payable or paid until after such completion and the giving of such security or guaranties.

"(4) As to the railway mentioned in subsection (*e*) of section 8, said agreement shall not be less favorable to the province than terms set forth in letter in Schedule A."

5. Section 10 of the said act is hereby amended by adding thereto the following subsections:

"(*c*) In the case of the line from Robson to the Boundary Creek District being built by a company entitled to a land grant for the construction of such line, the subsidy herein authorized shall only be paid to such company on its giving up its claim to the land grant for such portions of its line.

"(*d*) In the case of the line from Teslin Lake to the Stikine River being built by a company entitled to a land grant for the construction of such line, the subsidy herein authorized shall only be paid to such company on its giving up its claim to the land grant for such portion of its line."

6. The title to said act is hereby amended by striking out the words "two million five hundred thousand" and substituting therefor the words "five millions."

7. No Chinese or Japanese person shall be employed or permitted to work in the construction or operation of any undertaking hereby subsidized, under a penalty of $5 per day for each and every Chinese or Japanese employed in contravention of this section, to be recovered on complaint of any person under the provisions of the "summary convictions act."

8. Notwithstanding the provisions of section 4 of the "railway assessment act," the land occupied and claimed as the right of way for the railroad mentioned in subsection (*e*) of section 8, hereinbefore enacted, and other lands occupied for station or engine houses, or other buildings connected with the actual operation of the railway, together with the personal property held in connection with such operation, including the rolling stock, shall be assessed as a whole, and at the sum of $2,000 per mile of track, including sidings, of the railway situate within the province and without the limits of any incorporated municipality.

Accompanying the act is a letter from Mackenzie, Mann & Co., the contractors for the proposed Yukon Railway,* stating that they are ready to undertake the contract, the subsidy to be $4,000 per mile from Teslin Lake to an ocean port in British Columbia, the whole not to exceed $1,600,000; the lieutenant-governor to have supervision of the construction of the wagon road and also of the railway rates. Consul Smith adds that no active steps, so far as he can learn, have been taken under this law, and it is probable that nothing will be done until after the election of July 9.

* See CONSULAR REPORTS No. 210 (March, 1898), p. 319.

CANADIAN IMPORTS FROM THE UNITED STATES.

Figures giving the total of imports into Canada from the United States for the fiscal year are awaited with unusual interest. Canada, in proportion to her population, is the largest consumer of our products. The figures that are obtainable give a forecast that is gratifying.

The following table includes all the leading imports from the United States except iron and steel and gold and silver, and covers the ten months ending April 1, 1897 and 1898, respectively (in 1897 the exports to Canada of gold and silver and manufactures thereof aggregated $5,267,576; of iron and steel and manufactures, $6,441,681):

Articles.	1897.	1898.	Articles.	1897.	1898.
Agricultural implements.	$291,107	$542,364	Typewriters	$26,417	$43,288
Animals	566,432	1,806,479	Leather and manufactures	757,531	807,240
Books	517,078	596,629	Naval stores	106,486	80,590
Breadstuffs	7,229,653	11,015,263	Oil cake	91,704	152,579
Carriages and vehicles	100,668	142,523	Oils	635,194	663,249
Bicycles	528,515	418,025	Paper	51,243	84,902
Clocks	307,900	266,649	Provisions	311,089	162,697
Coke and coal	7,433,275	7,746,990	Hog products	1,329,166	2,047,710
Cotton	2,792,895	3,771,132	Dairy products	217,925	501,347
Manufactures	2,752,798	1,944,842	Seeds	624,669	467,495
Copper	32,500	100,618	Tobacco	1,421,177	611,674
Fertilizers	80,192	89,652	Manufactures	55,357	52,664
Fruits and nuts	614,675	898,653	Wood (timber and manufactures)	1,677,904	2,029,729
Furs and skins	228 602	350,014	Wool	276,071	16,461
Hides and skins	805,361	414,077			
Instruments (scientific)	[illegible]793	256,935	Total	32,614,325	38,801,410
Hardware	[illegible]556	581,345			
Sewing machines	[illegible]392	117,695			

It will be noti[illegible] that twenty-three out of the thirty-two articles enumerated sho[illegible]n increase, some quite marked, and the total is nearly a 20 per c[illegible]t advance over the same period of 1897, although this was the ba[illegible]ner year in exports from our country to Canada, there being a steady increase from $44,858,039 in 1886 to $64,334,800 in 1897. Evidently the totals for 1898 will be anything but disappointing.

The new tariff, giving Great Britain a 25 per cent preferential duty, goes into effect August 1 next, and it will undoubtedly give that country a portion of the trade that the United States has won; but it is doubtful if the decrease will be as marked as anticipated. Perhaps the lines in which the United States and Great Britain compete most seriously are iron and steel and cotton.

English exports to Canada of iron and steel aggregated $3,157,384 in 1897; United States exports in this line, $6,441,681. But makers of iron and steel in the United States have recently demonstrated their ability to undersell Great Britain in her own markets, so the Canadian trade can probably be counted upon to take care of itself.

In cotton and manufactures thereof Great Britain sold Canada in 1897 to the value of $3,551,560, while the United States sold $5,545,693. But Canada is now commencing to manufacture her own cotton goods, and, as will be noticed from the table given above, the imports of cotton from the United States this year show quite an increase, while the imports of cotton manufactures show a marked decrease. England has only cotton manufactures to sell, and the changing conditions are all in favor of our country.

In breadstuffs, coke and coal, hog products, dairy products, seeds, tobacco, and lumber England does not compete with the United States. The total under this head for ten months of 1898 reached the enormous sum of $24,472,872. Great Britain's entire exports to Canada in 1897 only amounted to $33,157,234. There has been a steady decrease in her Canadian trade since 1883, when it reached high watermark—$52,052,465. The preferential tariff may not do more than overcome the constant shrinkage that adverse conditions have forced each succeeding year (with spasmodic recoveries) since 1883.

Canada's development in the past five years has been marvelous, and her people were never so active and hopeful. She has at present, according to Bourinot, a population of 5,000,000 (against 1,000,000 in 1840) and a total trade of $250,000,000 (against $25,000,000 in 1840). If the commission that is soon to meet in Ottawa accomplishes the results hoped for, establishing the present very friendly relations on an enduring basis, there will be a prodigious growth of trade between our Republic and the Dominion; for Canada has but just commenced to develop her great natural resources.

HARLAN W. BRUSH,

CLIFTON, *July 11, 1898.* *Consul.*

INCREASE IN CANADA'S TRADE.

I have the honor to report in regard to the trade of Canada for the fiscal year ended the 20th of June last.

The returns for 1898 show an increase of over $44,000,000 in aggregate trade over that of any other year. The increase in the revenue from the duty collected under the reduced tariff is stated as

being over $1,983,263. The increase on the year's imports over that of 1897 is $19,336,000; while the exports exceeded that of 1897 by $24,723,000. The following are the figures for 1897 and 1898:

Description.	1897.	1898.
Imports.		
Dutiable	$66,220,765	$74,542,947
Free goods	40,397,062	51,698,125
Coin and bullion	4,676,194	4,389,123
Total	111,294,021	130,630,195
Duty collected	19,891,997	21,830,230
Exports.		
Canadian produce	119,685,410	139,402,279
Foreign	10,825,163	14,691,911
Coin and bullion	3,492,550	4,632,611
Total	134,003,123	158,726,801
Grand total	245,297,144	289,536,996

The increase in the exports over 1897 is therefore $24,723,678, and the increase in the imports for the same period is $19,836,174. The increase in the aggregate trade is $44,059,852.

I hope to soon be able to give a detailed report of the United States trade with Canada.

URBAIN J. LEDOUX,

THREE RIVERS, *July 20, 1898.* *Consul.*

WARNING TO ALASKA PROSPECTORS.

Care should be taken, by those who contemplate going to the gold fields, in entering into transportation contracts. It appears that certain companies have obtained a considerable sum of money (generally $500 for each person) upon very ingeniously worded contracts, that the persons paying should be transported to the gold fields in the north, with all necessary outfit furnished and expenses paid. In three cases in which men have paid their money they have been brought, at slight expense, to this and other ports, and then abandoned.

The men who had contracted with one of these companies became suspicious while at this port, but after an explanation by the agent, they agreed to go forward. The following extract from a letter from one of them shows how they have been treated:

FORT WRANGELL, ALASKA, *June 15, 1898.*

* * * * * * *

The company induced us to come to Wrangell, and after pulling the provisions for 15 miles up the Stikine River, we were sent into camp and have remained there

ever since. When we have asked to be put ahead we have been put off with promises, and we now feel that they do not intend to do anything but promise until we are discouraged and leave them, forfeiting the money paid. We wish to ask you if there is not some way by which we can compel them to fulfill their part of the contract or return our money. We are now here, practically without money and far from home, and if you can aid us in any way you will confer a lasting favor upon thirty stranded men from the old Bay State. We have now been here since March 30.

I would suggest that persons desiring to go to the gold fields in the valley of the Yukon take every possible precaution. I have abundant evidence that several companies are now, and have been for some months, engaged in this nefarious traffic.

L. EDWIN DUDLEY,

VANCOUVER, *June 28, 1898.* *Consul.*

INCREASE OF GERMAN CONSULAR SERVICE IN BRAZIL.

Ambassador White writes from Berlin, under date of June 16, 1898:

Complaints have frequently been made in the German press of late that imperial interests were not satisfactorily cared for in Brazil, and that German subjects living in that country, or temporarily sojourning there for business or other purposes, were not accorded sufficient protection by the nonprofessional (frequently native Brazilian) German consular officers. This subject is semiofficially referred to in last night's North German Gazette, where the statement is made that a professional consul (a brother of the German consul at Singapore) is already en route for the province of São Paulo; that it is understood that the former governor of Cameroon will be sent to Santa Catharina, to reside at first at Desterro (Florianopolis); and that another professional consul will be sent to Curitiba, so that Germany will soon have professional officials in all of the four South Brazilian States—Rio Grande do Sul, Santa Catharina, Parana, and São Paulo—there being already such officials at Porto Alegre, as well as at Rio de Janeiro and Bahia.

Many of this morning's papers comment upon this as a step in the right direction, and the Neueste Nachrichten, which has been particularly active in urging an increase of the character indicated, says that this is nothing more than a beginning, as one consul apiece for each of the four States named is not sufficient for the protection of German subjects who live there and for the fostering of German interests.

CONSTRUCTION OF PROJECTED RAILWAY IN HAITI.

I have the honor to report that plans are being perfected for beginning, within the next two months, the construction of a line of narrow-gauge railway from Cape Haitien to La Grande-Rivière du Nord, a point situated about 18 miles to the northeast. The capital stock is $450,000 and the estimated cost $250,000. The syndicate projecting the enterprise has already subscribed $25,000; while 675 shares, at $500 a share, are open to general subscription, with a guarantied interest by the Government of 8 per cent. The material, the contract for which has not yet been awarded, is to be purchased wholly in the United States. Mr. H. Thomasseh, the engineer who is to direct the work and who also constructed the tramway at Port au Prince, testifies to the superior workmanship and incomparable durability of material obtained from the United States.

The following named gentlemen compose the syndicate: Gen. Nord Alexis, Blanc Eusèbe, Gen. Th. Béliard, John Laroche, General Turenne, Jean-Gilles, Cincinnatus Leconte, General Mompoint, Turenne Leconte, General Papillon, Ed. Kampmann, Gen. St. Martin Dupuy, Vilbrun Guillaume, H. Thomasseh, Gen. Albert Salnave, Tertullien Guilbaud, Thales Manigat, Frank Dutton. Some of these gentlemen are at present ministers of the Government, some ex-ministers, and others business men of prominence and standing.

In the articles of incorporation, the Government grants to Messrs. Cincinnatus Leconte and Blanc Eusèbe, the former at present Minister of the Interior and Public Works, the exclusive privilege of constructing the road in question, the concession to last for a period of sixty years. All articles and material necessary for the work are to be admitted free of duty. The Government grants to the concessionaries, for a period of thirty years, the tolls of an iron bridge, which is to be the terminus of the road at Cape Haitien; and also the public lands in the districts of Cape Haitien and Grande-Rivière along the route.

The country through which the road is to pass is a beautiful and fertile plain, adapted to the cultivation of all the peculiar products of the island, and is said to be specially suited to the growth of the banana. The roads at present traversing the region are in very poor condition, and in wet weather are well-nigh impassable, entailing great hardships upon the peasant producers in getting their produce to the markets. The transportation methods are very primitive. The donkey is the universal beast of burden, and, although

it is in general a dwarf species, it is made to do all the work that is generally imposed upon horses. Not only the great bulk of vegetables, fruit, coffee, and cacoa is brought to the market by donkeys, but they carry almost all the immense amount of logwood and logwood roots shipped from this country.

In such a country and under such conditions, a railroad is not only a prime necessity, but must work a sort of industrial revolution. It is expected by its projectors that it will stimulate production to an unprecedented extent by giving the industrious peasantry the benefit of rapid transit and modern market facilities, thus becoming at once a profitable investment and a substantial public improvement.

LEMUEL W. LIVINGSTON,

CAPE HAITIEN, *July 16, 1898.* *Consul.*

GERMAN COMMERCE IN HANKAU.

Hankau's commercial importance, especially for German trade, is rapidly increasing. Lying as it does at the head of navigation (for seagoing ships) of the Yangtze Kiang, it is the natural commercial center for middle, northwest, and west China. It is surrounded by an enormous territory ripe for development—a territory able to consume and produce, a territory whose land and water ways join at Hankau. There is every reason to believe that, at a date not very far distant, the inland canals will carry the world's commerce to the very center of the Celestial Empire. Railroads will run from Hankau to Pekin, and later to Canton. There is every prospect of Hankau having a great future and becoming one of the most important harbors in the Empire.

Hankau's foreign commerce, according to the only available statistics, amounts to about $50,000,000, of which $16,600,000 are in foreign and $15,000,000 in domestic imports; and over $18,000,000 in exports. Of the imports, besides the machinery imported exclusively from Germany for Government industries, petroleum is perhaps the most important item. Hitherto, this article has come from Russia and the United States, through German and English firms, the amount averaging 12,000,000 gallons. Langkat oil (Sumatra), introduced by a German house, is beginning to compete. There is no longer any doubt that petroleum reservoirs, like those at Shanghai and Kowloon, will be established here, although the Government is at present opposed to them. The other imports are chiefly in the hands of Chinese. The tea trade is in the hands of Russians and English, with a tendency to go over entirely to the

former. Germans play a very insignificant rôle in this trade. Nearly all other exports are in the hands of Germans.

In no port of the Chinese Empire are Germans so powerful and independent as in Hankau. The shipping trade was until recently almost, if not entirely, monopolized by the English. German trade with Hankau is only fourteen years old. With wonderful skill and foresight, the German merchants selected the soil in which to sow, if one may use the metaphor, worked it, cared for it, and are now reaping rich harvests. "There is no doubt," says a German writer from whom I have quoted many of the above statements, "that the German merchant is more industrious, attentive, and energetic than any other merchant in China, not excepting the natives. A short stay in Hankau will prove this fact." He continues:

Vast quantities of articles—hides, horns, gallnuts, hemp, skins, furs, brushes, tallow, etc.—pass now via Hankau, because Germans have helped develop the trade. There is every reason to rejoice when one contrasts German activity and enterprise with the ponderous indifference of the average English merchant. The latter goes on in the ruts of other years, satisfied with the very considerable share that falls to his lot. He makes no move to increase his trade. The German, on the other hand, has eyes and ears for everything. Recently, the tariff tables told of 20,000,000 to 30,000,000 eggs shipped via Hankau to other Chinese ports. Three German firms opened works for preparing albumen, and are making money in exporting it. Estimates put Germany's trade with Hankau in 1896 at about $10,000,000. One fact, however, is apparent, and that is that German houses give English river ships their largest consignments of freight. Measures may soon be taken to put German boats on the Yangtze Kiang.

J. C. MONAGHAN,

CHEMNITZ, *June 16, 1898.* *Consul.*

MATCH INDUSTRY IN JAVA.

It appears that the match industry of Java, of which such great things were at one time expected, is now in a very languishing condition, there being only one factory, that of Noothout in the Kedirie district.

Notwithstanding what is here called the high duty of 6 per cent ad valorem which is levied on foreign matches, the foreign varieties find an extensive sale, especially the Japanese, in spite of their inferior quality.

The factory at Kedirie claims to be powerless in the face of this competition, and has asked the Government for a temporary indemnification equivalent to 25 per cent of the excise (internal revenue) duty now levied on matches—this duty being 16 cents per gross of

144 boxes, levied on foreign and domestic matches alike. The managers say that if this compensation were granted them for the period of five years for a maximum of 100,000 gross of boxes per year, they could compete with the foreign products. After that time, they are confident they could hold their place in the estimation of consumers. The Government is, I understand, disinclined to grant financial assistance to the industry.

The native matches are of as poor quality as the Japanese; and in the rainy season, which lasts six months in the year, it is no uncommon thing to go through a whole box of Japanese matches without finding one that will strike. The kind commonly in use among Europeans is the Swedish "Jönköping," which competes with the others in spite of higher price, the difference being as follows:

Description.	Price.	
	Florins.	
Swedish ..... per case of 10,000 boxes...	80	$32
Japanese ..... per case of 7,200 boxes...	47	18

For the native make, there are no quotations, but they sell for about the same as Japanese.

I append a statement of importations of matches for the year 1896. It is, however, of very little value, as, for instance, you will see no mention made of Sweden, and yet a large proportion of the matches used here comes from that country. The reason is that they are nearly all imported through Germany and Holland. There are also imitation Jönköping matches, made in Germany, which have considerable sale here at a slightly lower price than the genuine ones.

Country.	Quantity.	Country.	Quantity.
	Gross.		*Gross.*
Holland	373,721	China	3,917
Germany	6,698	Japan	28,840
Penang	263,614	Sarawak	384
Singapore	1,021,309	Total	2,768,533
Hongkong	1,070,050		

I am unable to get accurate figures of native production, but it is probably about 300,000 gross.

SYDNEY B. EVERETT,
Consul.

BATAVIA, *May 26, 1898.*

THE PORT OF HIOGO.

Under date of June 22, 1898, Consul Lyon, of Hiogo, says:

The very noteworthy expansion of commerce at this port during the last thirty years,* and the phenomenal growth of its two large cities, have caused much commendable pride upon the part of the Japanese in this consular district, and were made the occasion of a celebration in May last. The demonstration was presided over by the mayor of Kobé,† and there were present the governors of Osaka and Hiogo, many distinguished Japanese officials and statesmen, the foreign consuls, representatives of the press, and the leading merchants of the port, both native and foreign. Speeches laudatory of the great commercial and industrial progress made were delivered by Japanese orators, and upon invitation one was made by the doyen of the consular body at this port, in the course of which he laid especial claim to the credit due foreign merchants, for their large share in helping to make the port such an important one in the eyes of the world. These remarks were heartily indorsed by the Japanese speakers.

The great volume of commerce at this potr and its stimulating effect upon the consular district were fully set forth. Thirty years ago, it was said, Hiogo was but a small town. The important city of Kobé was not even in embryo, and the plain upon which it now stands was then only a sandy and barren desert. To-day, long rows of substantial business houses, brick warehouses, banks, offices, consulates, and private residences line the broad macadamized avenues of the new city, and truthfully attest the splendid energy of the foreign merchants of the port. The bay, filled with shipping, indicates the cosmopolitan character of the commerce. It was shown by the addresses, that the combined exports and imports had grown from almost nothing until they now exceed the sum of $80,000,000 annually.

TRADE OF CALCUTTA WITH THE UNITED STATES, 1897-98.

The following report, compiled from the returns of the collector of customs of the port of Calcutta of the foreign trade for the official years 1894–1898, showing the trade of Calcutta with the United States should be of interest. The reductions are based upon the commercial exchange value of the rupee—32 cents.‡

---

* The port of Hiogo was opened to the commerce of the world in 1868.

† The cities of Kobé and Hiogo form one community.

‡ The value of the rupee, according to United States Treasury estimates, was 19.4 cents on April 1, 1898.

The imports and exports from and to the United States were as follows:

Description.	1893–94.*	1894–95.	1895–96.	1896–97.	1897–98.
Imports.					
Merchandise	$4,557,830	$1,727,564	$2,294,856	$2,356,813	$2,168,149
Treasure					5
Total	4,557,830	1,727,564	2,294,856	2,356,813	2,168,154
Exports.					
Indian produce	9,063,618	14,705,439	14,639,298	12,305,371	16,550,342
Foreign merchandise	2,122	3,201	4,737	9,954	692
Total	9,065,740	14,708,640	14,644,035	12,315,325	16,551,034
Total trade	13,623,570	16,436,204	16,938,891	14,672,138	18,719,188

* The fiscal years of British India end on March 31.

The decrease of the previous year in the value of the trade with the United States has been more than made up in 1897–98, the total value having gained nearly 30 per cent. While the imports were less by over 8 per cent, the expansion in exports was 35 per cent. The falling off in imports was due to special causes. In the preceding year, the necessities of India, from drought and famine, induced large imports of grain from the United States; the quantity received in 1897–98, being much less, has resulted in the decline of imports recorded above. Had it not been for this, imports as well as exports would have shown a favorable result, for the chief imports from the United States—kerosene and lubricating oils—were on a larger scale. The trade for the past five years in these oils has been as follows:

Year.	Kerosene oil.	Lubricating oil.
	Imp. galls.	*Imp. galls.*
1893–94	38,204,809	.....
1894–95	14,055,160	227,009
1895–96	17,882,735	503,445
1896–97	10,125,619	647,517
1897–98	13,892,174	500,220

The total exports of oil from the United States last year were large, exceeding 870,000,000 gallons, of which 37,000,000 gallons came to British India.

American drills imported were valued at over 1 lakh ($32,000) and many other items exhibited an increased value; but this is largely due to the fact that during the latter part of the year direct communication was established by the Bucknall line of steamships.

One of the chief features of the year's trade has been the importation of American steel rails, valued at 2 lakhs ($64,000), for one of

the leading railways of India. Great stress has been laid, in the past year, on the growing competition of the United States in supplying its manufactures to the world generally, and it is said to have been demonstrated that the highly paid labor of our country under intelligent and progressive management, combined with improved machinery and assisted by the low average rates of railway transport, is gradually enabling the United States to surpass the results of European low wages, frugal living, and a daily labor of twelve hours in the competitive struggle that is now becoming more and more severe. The importation of steel rails noted may be considered a fact in favor of this view.

The large trade of Calcutta with the United States embraces the following principal exports:

Articles.	1893–94.	1894–95.	1895–96.	1896–97.	1897–98.
Jute manufactures	$2,288,282	$3,467,561	$3,780,122	$4,276,344	$6,390,603
Hides and skins	1,755,377	2,812,400	3,857,326	2,618,472	4,284,072
Jute, raw	1,816,514	3,364,345	2,264,734	1,925,635	2,745,775
Indigo	1,383,698	2,138,057	1,710,274	1,680,085	1,548,807
Lac	711,348	1,173,364	1,453,270	942,423	881,332
Saltpeter	209,578	299,215	513,354	496,942	315,812
Tea	21,633	46,300	109,117	141,536	168,296
Caoutchouc	71,600	67,147	48,075	63,146	67,378
Seeds	266,721	1,012,408	510,919	3,737	38,219

The steady advance in jute manufactures continued in the past year, and the figures are the highest recorded. The enormous exports of wheat from the United States during 1897 would alone have caused a considerable demand for gunny bags and cloth, but the raw-cotton exports were also greater than in 1896.

There was a considerable expansion in hides and skins, though the total value is not greatly increased over that of 1895–96. Exports of hides may have been influenced by the smaller quantity obtainable in the United States, recent statistics showing that the stock of live cattle there is decreasing.

Though the quantity of indigo shipped to the United States was slightly less than last year, it was greater than that to any other country.

After advancing steadily for three years, the trade in saltpeter has declined considerably; the exports, however, appear to fluctuate greatly.

The trade in tea has developed, and direct shipments to the United States have considerably increased.

There was quite a reduction in the trade with the United Kingdom during the year, the decline in value being equivalent to 8 per cent, and the total trade recorded the smallest since the year 1892–93,

the loss being apparent in both imports and exports. The trade with Germany continues to expand, the increase recorded being over 9 per cent. There has also been a steady increase in the trade with Austria-Hungary, Italy, and Belgium, but a failing off in the trade with France and Russia, the imports from the latter country declining considerably, owing to smaller receipts of kerosene oil.

The value of the imports of cotton goods was about 150,000,000 rupees ($48,000,000), of which the United Kingdom furnished about 94 per cent, but about $4,000,000 less than the previous year. Of this vast trade the United States got only the small sum of $32,000.

In previous reports, I have called the attention of our cotton manufacturers to this market, with its vast population whose principal clothing is cotton; and the above figures show the magnitude of the trade and the possibilities of the expansion of our exports by proper efforts.

There was also, during the year, a large trade in metals, railway supplies, machinery and millwork, hardware and cutlery, liquors, woolen goods, apparel, provisions, drugs, etc.; chemicals, paints and colors, carriages, bicycles, glass and glassware, stationery, umbrellas, and paper and pasteboard; the imports in these lines amounting to over $35,000,000. While these were the principal imports, there was a large trade in many other classes of merchandise.

This immense trade is gradually slipping away from the United Kingdom—which has practically controlled it for the past hundred years—as shown by the loss of about 8 per cent last year, and is going to other countries.

As stated before, with the present direct communication with India, saving time and expense of transshipment, our enterprising manufacturers can secure a good share of this trade.

R. F. PATTERSON,
Consul-General.

CALCUTTA, *June 15, 1898.*

CANAL AND RAILWAY CONTRACT IN MADAGASCAR.

I transmit herewith a clipping from the Journal Officiel, with translation, which may be of interest.

The French Government has granted a concession to a French company, which has begun work. If completed, the distance between here and Tananarivo will be shortened 50 per cent; facilities will also be afforded for the transportation of passengers and freight to the various distributing points on the south and west coasts of

the island. The Government at present expends annually 600,000 francs ($115,800) for transportation to the capital. The country through which the railroad is to pass is very mountainous, which will make the expenditure great; but the completion of the road will do much in opening this terra incognita.

M. W. GIBBS,
Acting Consul.

TAMATAVE, *June 2, 1898.*

The decree, after the formal preamble, reads:

ARTICLE I. The agents of the French Company of Madagascar are authorized to enter private domains, to make the surveys necessary for the work of constructing a canal from Tamatave to Andevorante and a railway from Tamatave to Ivondro, works which were the subject of the treaty of October 6, 1897, ratified by the Minister of the Colonies and the said company.

ART. II. The entrance of the agents of the French Company of Madagascar into houses without permission of the owners or of their representatives is forbidden. In other closed domains, entrance can not be effected until five days after notification to the owner, or, in his absence, to the agent of the property, the delay extending in default of a known agent, from the day of the notification to the owner, made at the office of the administrator of the province. This delay having expired, if no one presents himself to give the required permission, or if anyone opposes it, the agents are authorized to enter with the assistance either of the commissary of police, or corporal of gendarmes, or any qualified representative of public authority.

ART. III. No tree can be cut down, or any damage to property done, before an amicable agreement has been reached as to the extent of the injury; or, in default of this agreement, until witnesses for both sides have been heard in order to arrive at a correct estimate of the damages. In this latter case, the final decision will be given by the Government.

ART. IV. The provisions of article 8 of decree 148, November 20, 1896, concerning temporary occupations, apply to the recovery of indemnities which may be due to the proprietors by reason of injuries due to the operations of the French Company of Madagascar.

ART. V. The present decree shall be posted in the chief towns of the provinces of Tamatave and of Andevorante, in place of the usual announcements, during ten days at least before the commencement of the surveys in each of these administrative districts, and should be presented at every requisition.

ART. VI. Persons who, after the prescribed formalities have been complied with, resist the entrance of agents of the French Company of Madagascar into their domains shall be prosecuted in conformity with the laws, without prejudice to action for damages, which may be brought by the said company.

ART. VII. The attorney-general, the chief of the judiciary, the director of public works, and the administrators, chiefs of the provinces of Tamatave and of Andevorante, are charged, each in his own jurisdiction, with the execution of the present decree.

Given at Tananarivo, the 9th of May, 1898.

No. 216——9.

THE FRENCH BUREAU OF FOREIGN COMMERCE.

The French Bureau of Foreign Commerce, whose organization was reported in a former report* from this consulate, has recently been enlarged and its duties defined. A council of administration, consisting of twenty-seven members, and a board of directors composed of nine members, the latter under the direction of the president of the Paris Chamber of Commerce, were appointed on June 30, and a few days later the names of two hundred and seventeen members appeared in the Paris press. At present, these three bodies form the National Bureau of Foreign Commerce, from whose intelligence and activity France expects the opening of new and extensive channels for the products of her fields and workshops.

It is contemplated that one division of this bureau will devote its attention to continental commerce, and the other, and abler one, to the colonies and the Orient. This plan may be said to be patterned after Russia, which has two foreign ministries—one for the Orient and the other for continental Europe.

The French Bureau of Foreign Commerce will be in close connection with all the boards of trade in France, its colonies and protectorates. There will also be colonial bureaus, one of which was recently organized in Tonkin. It is composed of French citizens and natives appointed by the governor of Tonkin, and its duties are to find new openings for French trade and to improve the commerce of the province. If a locality is discovered where it is believed a new industry would thrive, where a railroad should be opened or a river dredged, the subject will be thoroughly investigated, and in due course of time, a report upon it will reach the Bureau of Foreign Commerce at Paris. The exclusion of all competition with France, her colonies and protectorates, is evidently one of the means to be used to advance French interests.

At a meeting of the chamber of commerce of Haiphong on April 28, 1898, a committee appointed to consider a question of customs tariffs reported that "it would endanger the future of the colony to favor, in too large a measure, the Chinese commercial element to the detriment of the European or of the Anamite." "European" here means French, and "Anamite" means French interests in Anam. The report, which was adopted, declared that no obstacle should be thrown in the way of the Chinese purchasing such special articles of consumption as originate in their country, "provided that similar articles are not produced in Europe or Anam." "We have

*See CONSULAR REPORTS No. 210 (March, 1898), p. 323.

applied," says the report, "the same principle to European products destined for the European population of our colony." That is to say, everything needed in Tonkin which is not produced there or in France must pay a duty. It may be accepted that this principle will be applied wherever France gains a foothold.

One of the distinct purposes of the new Tonkin commission will be to create a body of natives who, by their commercial and moneyed importance, will offset the influence of the powerful mandarin class who stand in the way of every form of progress and constitute an almost insurmountable barrier to commercial development.

It is altogether probable that the trade of Russia and China will receive the most attention from the newly appointed commission. The proclamation recently issued by Russia, granting free trade to the world for the next ten years in machinery, to be used in the mines of Siberia and the Ural, will be very liberally interpreted here, and under its provisions, a variety of machinery will be manufactured for the Russian markets. In response to the complaint that the French, as the only European ally of Russia, do not receive a fair share of Russian patronage, it is now announced that French firms will be permitted to compete with Russian firms for the furnishing of Government supplies. Within the last week, it has been announced that a very large reduction has been made in the Russian duties on portable engines with thrashers, fertilizers, and agricultural chemical products, and the duty entirely removed from many agricultural implements or parts of them. The manufacturers of France are preparing to reap the utmost possible benefit from these concessions.

France has invested in manufactories in Russia, and there is now considerable talk of further investments in the same direction. A recent French publication, entitled La Russie Industrielle, is attracting the earnest attention of the business men of this city. I quote from it a table giving the importations into Russia for the year 1896:

France	$656,439
Germany	15,792,110
Austria-Hungary	2,854,148
Belgium	1,646,502
Total	20,949,199

Agricultural machinery was imported to the value of $4,223,282. Of this sum, Germany is credited with something over $1,500,000; England, $1,750,000. Germany is also credited with $2,391,185 for locomotives "à système compliqué," and England with $1,879,802. The larger part of the total comes under the designation of "machinery of all kinds."

French investors in Russia have entered very largely into railroad enterprises. I can find no precise figures on this subject, but it is

generally stated that citizens of France have placed several hundred millions of dollars in Russian railroads.

The author of La Russie Industrielle says that "English locomotives have dominated the Russian market, encountering no obstacle on the part of the Russian or other foreign makes." Locomotive works under joint Russian and French management have recently been established in Nikolaieff, southern Russia, with a capital of $100,000. An American firm is reported to meet with no competition in the manufacture of steam pumps, which are pronounced to be the best make and "infinitely superior to domestic productions." American piping is also credited with monopolizing the market. Next among American manufactures comes agricultural machinery, McCormick in the lead. A great future is promised in Russia for French agricultural machinery, some stress being laid upon the fact that the bank advances to farmers money for the purchase of implements, provided their land is free from mortgages. In the cement industry, small shops, indifferently equipped, compete with outside producers; a fact cited as indicative of a probable opening for French cement. In imports of cotton yarn for weaving, England stands first, followed by Germany and France.

France is advised by La Russie Industrielle to send specimens of her machinery and whatever her manufacturers purpose to introduce into the Russian market, to the great fair held annually at Nizhni Novgorod. Russians will not buy upon hearsay. They want to see what is offered them. They are not satisfied with descriptions or drawings, however perfectly they may set forth the merits of an article. While they regard a description or a cut as possibly correct, this will not take the place of the absolute proof of the senses; and if they are favorably impressed, the object will be sure to find a market among their 126,000,000 inhabitants. French manufacturers know that the Russian will take no risk in selecting machinery with which to develop the rich deposits of manganese, tin, copper, lead, silver, zinc, salt, coal, and iron which are found in Siberia and the Ural, and they will display the best products of their mechanical industry at the Nizhni fair. Some nations have done better than this in establishing factories and mills in Russia. Belgium's investments of this kind aggregate about $60,000,000, and Germany's $2,500,000. Americans are spoken of as "men who imitate the others without showing so much intelligence." Americans are credited, however, with having founded the Mining and Metallurgical Company of Nicopol-Marioupol, with a capital of $2,200,000, for the purpose of producing manganese, while there are numerous other enterprises in Russia owned by Americans not referred to in this book.

The French point to many elements of wealth in the lands of

their northern ally, which they expect to take part in developing. It is the fourth gold-producing country in the world, coming next to Australia, the United States, and South Africa. It furnishes 96 per cent of the world's product of platinum, the latter metal being found only in the Ural, while gold occurs both there and in Siberia. Coal, iron, zinc, copper, manganese, and other mineral deposits are practically unlimited in the Ural and Siberia; and the great industrial nations of the world are invited to furnish machinery for developing this enormous wealth. France has already had substantial proofs of the favors she will receive in this comparatively new field of industry, as Russia's purchases of firearms have recently been transferred from England to this country.

A prominent French writer has recently declared that "it is now more imperative than ever before for the nations to enlarge their fields of commerce." Another, commenting upon the work before the new Bureau of Foreign Commerce, said that—

> The incessant fluctuations of trade and industry and the infinite discoveries of science demand a degree of ability, mental activity, watchfulness, unity of action, promptness of decision, and boldness of enterprise which is hardly consistent with the bureaucratic formality and lack of personal responsibility in a department of state.

It is cited that 20,000 English ships entered the nineteen treaty ports of China last year, against 174 from France and 2,140 from Germany. However, it is said that trade is breaking out of its old channels, and Arthur Chamberlain, a brother of the British Secretary of State for the Colonies, is quoted as asserting that Constantinople last year bought $50,000,000 worth of firearms from Germany which formerly would have been purchased from England.

It is generally accepted that nations must look to colonies for new outlets for their manufactures, as competition has brought the cost of production down so low that countries can not add much to their wealth working over old fields. They believe the stopping point has been reached in cheapness of production, and now that the demand from the home market has been supplied, the only opportunity for further expansion lies in the foreign markets. "Our commercial exchanges must stop at our frontiers unless we can enter new fields" is an opinion which was frequently expressed when the new Bureau of Foreign Commerce was created.

China, which is believed by many to be soon destined to undergo a division among the powers, is considered one of the most tempting fields for future enterprise. The work of the commission sent by the business men of this city to China is still being vigorously followed up. The commercial German mission to the East recently opened in Berlin, for the private inspection of the business men of

Germany, a collection of five thousand or more specimen articles gathered in China, Korea, and Japan, for the purpose of showing what European and American goods are sold in the East and what goods are manufactured there; and to inform the Germans what they will have to compete with in exporting to the East and what they can import from there in return. England's two recent missions to China, reported by Mr. Blackburn and Mr. Litton, contain invaluable aid for the expansion of British trade in the East. France is trying to keep abreast of the other great powers in the struggle for the markets of a population of from 350,000,000 to 400,000,000 people, forming a nation which, to quote from a great European authority, "is the most potential market in the world." Whether this tremendous market shall be a feeder to Russia's Trans-Siberian Railroad, to England through Hongkong, to Germany through Kyaochau, or to France from Tonkin, is the momentous problem of the coming century.

An economic writer says of the French Bureau of Foreign Commerce:

> Though it pertains to the Ministry of Commerce, it is nevertheless independent of the Government; it has its own identity, its own autonomy.

Its work is supplementary to the Government department. It seeks to combine individual exertion and direct individual enterprise into profitable channels; and its one definite object is to extend the commerce of France into the markets of the entire world.

JOHN C. COVERT,

LYONS, *July 11, 1898.* *Consul.*

THE CONSULAR SERVICE AS AN AID TO FOREIGN TRADE.

With its ever-growing foreign commerce, Germany is eager to employ every method to increase its exports. Its consuls are the object of criticism—they are not as careful in collecting information as are those of other countries; they do not post themselves, and are unable to post merchants and manufacturers at home; they report past conditions instead of projects for the future. Then, again, the reports, by the time they are published, are too old to be of service. Belgium and, above and beyond all countries, the United States understand the importance of carefully compiling and editing and promptly publishing consular reports. In two journals, the Recueil Consulaire and the Bulletin Commercial, Belgium offers its merchants and manufacturers most of the valuable information collected by its consuls. I may add, by way of parenthesis, that our

CONSULAR REPORTS are put into the hands of every chamber of commerce in Belgium, and that notices are published in the papers to the effect that they will be found in the reading rooms of the said chambers of commerce.

There has recently been a movement in Belgium to improve its own service. Consuls are urged to keep the Home Government posted as to openings in all foreign markets. Not only are the facts to be furnished, but consuls are to express opinions as to how to extend trade. This information, it is urged, should be put at the disposal of the Home Government as early as possible. All reports of an important character are to be sent by direct post, rather than by the roundabout ways hitherto in vogue. Diplomatic attachés are to be urged to aid the consuls in preparing reports, etc.

Apropos of this plan is one designed by France. To aid her export trade, the French Republic is to appoint Frenchmen living in other countries as foreign commercial counselors (conseillers au commerce exterieur), whose function it shall be to give information about the industrial, economic, and commercial districts in which they are located; also to send reports, from time to time, on special branches of trade to the French Department of Commerce. This information is to be published, immediately upon its arrival, in the official papers, or is to be put at the disposal of interested parties, especially of those asking for the facts. The most important questions relate to possibilities of opening markets for French goods, descriptions of articles suited to the country, trade routes, packing, etc. They are also to supply names of reliable parties to act as agents, report as to commercial customs, methods of payment, and efforts of competitors—in short, everything that in any way may interest French trade. These counselors are to supplement the work of the consuls.

German journalists are asking whether such a system would not aid the foreign commerce of their own country. My impression is that nothing can take the place of a careful, hard-working consul who knows the language of the place.

J. C. MONAGHAN,

CHEMNITZ, *June 21, 1898.* *Consul.*

GLASS INDUSTRY IN GERMANY.

An extract from the annual report of the Oberfranken Chamber of Commerce for the year 1897 is translated as follows:

The trade in polished mirror glass is much duller than in previous years. The export to America has diminished to a large extent; and, although all the Bavarian factories of polished glass worked only one-third of the time agreed upon (ten

and one-half months), still the warehouses of the Association of Bavarian Mirror-Glass Manufacturers at Fürth became so overstocked that it was finally concluded to dissolve the association, because the burden of mutual guaranty became too heavy for many members. The stock of the association had to be sold at a loss, and since that time a system of price shaving has set in which, as a final result, will drive out of the market the weaker firms, if no change for the better comes in the business of glass manufacturing. It is most desirable that the duty now imposed by America upon polished glass be reduced, in order to facilitate exports of this product of our country.

The intention of the report seems to be to show that the Dingley bill has crippled the glass industry of Germany, and made the export of higher quality glass under the present circumstances almost impossible.

This complaint is not a new one. The report of the chamber of commerce at Fürth for the year 1896, issued in September, 1897, contains a similar statement, perhaps even stronger. It was claimed in that article that the export of polished mirror glass from Fürth had become a thing of the past, on account of the exceedingly high duty imposed by the Dingley bill; and it is further asserted that, although the unsilvered glass can be exported at a much lower rate of duty, even this has proven unprofitable, owing to the fact that the article becomes dulled in transit and needs such a costly repolishing at its destination that it absorbs all the profits of the exporter.

But real facts show the great exaggeration of the report, and do not bear out the statements. Either the apprehension as to the prospective dullness of unsilvered glass proved to be unfounded, or a better and more solid manufacturing process has been discovered. At any rate, the fact stands that the export of polished glass has not diminished. I admit that the digest of the invoice book for the quarter ending June 30 next will show on its face a decrease of $60,000 from the corresponding quarter of last year, which amounted to $322,721.57. But if we consider that the polished glass, now exported unsilvered, is naturally valued lower than the finished material, and also that the American importers overstocked their warehouses with foreign glass last year, in anticipation of the increased duty when the Dingley tariff should go into effect, the apparent decrease is readily explained.

This overstocked condition of the markets had, as a matter of course, a retrogressive effect on imports for some time after the passage of the Dingley bill. But the exports from Fürth—the principal center in Germany for polished glass, founded now on a sound and firm commercial basis—show for every month a marked increase, which furnishes a clear and satisfactory proof that this industry has been but temporarily affected and is now receiving greater impetus than ever before.

It may be observed that Germany, four-fifths of whose population sixty or seventy years ago consisted of farmers, is rapidly becoming an industrial nation; and this change is opening a most excellent and ready market to our American products. The large land-owners, once the almost exclusive masters of wealth, are demanding from the Government special legislation for their protection; but they can not check the industrial progress which the country is making. Every year, less help is granted the farmer, and the advisability of importing Chinese laborers for farm work has already been considered and seriously discussed by the German press.

With the beginning of spring, the young population of many farming districts migrate from the east to the west of Germany to get employment in the large manufacturing establishments there, which pay them threefold higher wages than the farmers will give.

EDMOND Z. BRODOWSKI,

FÜRTH, *June 27, 1898.* *Consul.*

SHIPPING OF GERMANY.

Under date of June 17, 1898, Consul Monaghan, of Chemnitz, says:

The number of vessels going in and out of German ports is constantly increasing. The passenger ships, freight vessels, and large fishing boats numbered in 1896, the last year for which I find figures, 147,536, with a tonnage of 32,046,888, an increase of 13,706 ships and 600,000 tons over 1895. Compared with the shipping of twenty years previous, the figures show twice the number of ships and almost three times as much tonnage. More important than these figures are those that show the number of ships that went in and out laden with the Empire's products and bringing foreign raw materials; there was 83 per cent increase in the number of laden ships and 152 per cent increase in the number of registered tons. As interesting as the foregoing are the figures dealing with ocean voyages of ships entering and leaving German ports. Of these, there were, in 1875, 45,302 ships with 8,604,610 tons; in 1896, 82,268 ships with 36,179,455 tons; laden ships in 1875, 33,233 with 6,940,155 tons; laden ships in 1896, 67,605 with 32,810,956 tons. This is indicative of marvelous progress. The growth in one year (1895–96) is almost 10 per cent. Ships ply to Denmark, Russia, Brazil, eastern Asia, the west coast of South America, to Australia, England, India, Africa, and North America. Economic writers call attention to the fact that the Empire, in its trade with South America, has emancipated itself from English ships. The greatest tonnage and largest ships are engaged

in trade with England and the United States. If we are to take part in the trade with South America and with the East, we must emulate this Empire in the matter of ships. Of all the ships that came into and went out of German ports in 1896, 72.4 per cent bore the Empire's flag. Of the steamers, 68.3 per cent were German. The details are as follows:

Flag.	Number.	Tons.
German	48,868	13,350,680
British	11,303	8,818,312
Danish	13,991	1,998,626
Swedish	7,207	1,336,692
Norwegian	2,478	365,946
French	177	149,303
Belgian	57	76,885
Spanish	92	75,802
All other	121	106,896

GERMAN TRADE WITH SOUTH AMERICA.

Consul Monaghan writes from Chemnitz, June 23, 1898:

Among South American republics, says a German newspaper, none has better buying ability than Argentina. In 1897, she took textiles, raw and finished, for 30,500,000 pesos (1 peso=96½ cents), against 38,400,000 in 1896. The decrease was due to bad harvests, and to the fact that the Republic has begun to manufacture for itself.

Other articles imported by Argentina were:

Articles.	1897.	1896.
	Pesos.	*Pesos.*
Ordinary hosiery	823,322	548,408
Handkerchiefs	533,986	341,747
Cottons	12,945,132	10,594,187
Half-linen goods	359,078	236,614
Bagging	5,058,161	2,700,850
Sailcloth	644,134	385,915

The imports of Argentina, in 1897, came from the following countries: England, 36,400,000 pesos; Germany, 11,100,000 pesos; France, 11,000,000 pesos; Italy, 10,900,000 pesos (Italian immigrants buy and bring with them large stores of Italian goods); the United States, 10,100,000 pesos; Belgium, 8,000,000 pesos. Germany's real trade is larger; for thousands of dollars' worth of goods go out to Argentina via Antwerp.

Colombia, Peru, Uruguay, and Venezuela took from Germany in 1897 goods worth $7,600,000, against $7,100,000 in 1896; Bolivia,

Ecuador, and Paraguay, $1,214,000 in 1897, against $1,161,000 in 1896. Almost every edition of the leading German papers calls attention to the opportunities offered by this war to lay the basis of a more permanent business with South American states. Some go so far as to urge a policy calculated to persuade the South Americans that the United States is working to bring all South and Central America not only under United States influence, but under the United States flag. Our manufacturers must see the commercial wisdom of disabusing the minds of South American peoples of this idea.

ECONOMIC CONDITIONS IN GUADELOUPE.

Referring to my report of May 24,* I would now state that, in the last number of the official journal, there has appeared a decree promulgating for this colony and its dependencies the federal decree of May 28, 1898, provisionally extending the privilege of "minimum tariff" to products coming from and originating in the United States.

The provision problem here is less difficult now. Flour, said to be of excellent quality, has been brought by enterprising agents, and is sold at remarkably low prices. The danger of actual suffering has passed, but prices have not yet become normal.

The general council has met and adjourned. The reports of the session are not yet published, but that of the finance committee I have obtained in part. The suspension of the "droit de consommation" (see my report of May 24) involved a reduction in receipts of 415,000 francs ($80,095), to which must be added, for the last six months of the year, losses in duties on various articles amounting to 115,354 francs ($23,263), and in taxes on alcohols, etc., to 117,450 francs ($22,668); a total reduction in receipts of 617,804 francs ($119,236). In addition, the colonial contributions to France have been increased 71,068 francs ($13,716). There is therefore a deficit in the budget for the year of 739,000 francs ($142,627) in round numbers, plainly visible. To combat this deficit, various bounties are to be suppressed, and reductions made, and economies introduced in the medical and hospital service. It is estimated that 289,560 francs ($55,885) will be saved in this way. The "droit de consommation" is to be replaced by direct customs taxes and by an octroi tax, the former yielding 424,000 francs ($81,832) annually, the latter, 96,000 francs ($18,528), or a total of 520,000 francs ($100,360). A further gain of 66,000 francs ($12,738) is estimated from increased octroi duties on wines and matches. There still remains a deficit of

* See "Tariff changes in Guadeloupe," CONSULAR REPORTS No. 215 (August, 1898), p. 594.

209,000 francs ($40,337). It is proposed to transfer this amount from certain sums already voted.

The colony is burdened with a high educational institution of doubtful value, which employs a greater number of professors than many an American college. This Lycée costs the colony 600,000 francs ($115,800) a year. Its entire suppression was voted; but it is a federal institution, and it will take a year to finally settle the question. Meanwhile, a paltry reduction of about 40,000 francs ($7,720) was voted in its appropriation.

This island is capable of producing great riches, and I believe that large amounts of American capital could be profitably invested in coffee, cocoa, timber, etc. A vigorous and economical administration is, however, necessary.

LOUIS H. AYMÉ,
Consul.

GUADELOUPE, *July 6, 1898.*

ITALIAN IMMIGRANTS IN VENEZUELA.

I inclose a clipping from the Venezuelan Herald, which contains a translation of the contract recently made by the Venezuelan Government and a syndicate of Italian capitalists, which is a substitute for the Dotti concession reported on January 10.*

The contract is a very favorable one for Venezuela, and, if faithfully carried out, will result in the establishment here of fifteen thousand families from the north of Italy. These immigrants will be given lands and houses and assisted in a financial way. It is hoped they will develop the culture of fruits and cereals and give particular attention to the culture of the grape and to wine making.

It will occur to many persons that the quantity of land which it is proposed to allot to each immigrant (about 14 acres) is very small, and experience will probably prove that cereals can not be properly raised on tracts of this size.

The success of the scheme, after the arrival of the immigrants, will depend upon the building of highways and railways to enable the immigrants to transport their produce cheaply to the local markets and to the coast.

A study of present conditions makes it evident that if the production of fruits were considerably increased, the growers would be forced to seek a market in the United States or other foreign countries, preferably the United States, by reason of its proximity and the great demand for tropical fruits which exists there.

FRANCIS B. LOOMIS,
Minister.

CARACAS, *July 7, 1898.*

* See CONSULAR REPORTS No. 210 (March, 1898), p. 361.

IMMIGRATION FROM ITALY.

[From the Venezuelan Herald.]

On the 1st of this month the Government entered into a really solid immigration contract. The contracting parties are the Minister of Agriculture, Industry, and Commerce, thereto authorized by the President of the Republic in council of his ministers and with the consent of the Government Council, of the one part, and of the other part The Italian Colonization Society, composed of the following corporations and individuals, namely: The Bank Credito Italiano, established in Geneva and Milan; the bank of Manzi & Co., established in Rome; Commandatore Ernesto de Angeli, Italian senator, Milan; Commandatore Juan Bautista Pirelli, of Milan; Baron Alberto Treves, banker, of Venice; Alberto Vonwiller, banker, of Milan; and the bank of Kusler & Co., established in Turin, and all represented by Commandatore Juan Bautista Cerletti under a power of attorney executed in Rome on the 29th day of March last.

There is nothing that Venezuela needs more than colonization on a sound basis, and, if the provisions of this contract are carried into effect, it should prove of inestimable utility in developing the agricultural and mineral wealth of the country. Under this contract the colonization company undertakes (1) to bring to this country during every three years three thousand European families, principally of the Latin race, fit for agriculture and known to be of good behavior, all which facts shall be certified by the consuls at the various ports of embarkation; (2) to erect buildings for the colonists and furnish them with agricultural implements, and to supply them with food, clothes, and medicine until they shall have reaped their first crop, and also to build a church, public offices, and schools in each colony; (3) to establish a bimonthly service of steamships between Italy and Venezuela, touching at Barcelona de Espafia, Teneriffe, and other ports and terminating at La Guayra or Puerto Cabello, and also calling, if required to do so, at any other ports subject to the fiscal laws of Venezuela; and to carry the mails to all such ports free of charge, the regular fare for passengers and freight not to exceed that charged by ships of like class and tonnage as those used by the company; and it agrees to charge only half fare to all employees of the diplomatic service (for themselves and their families) who use the ships, and to accord to them free passage if they officially reside or are going to reside abroad; (4) to establish in Caracas a banking institute, with branches in such districts of the Republic as may be deemed advisable, for the purpose principally of lending on mortgage to agriculturists and cattle breeders, the capital of such bank to consist of 20,000,000 bolivars ($3,860,000), 12,000,000 of which shall be devoted to ordinary banking business and the remaining 8,000,000 to lending as above mentioned; these two funds shall be kept separate and not allowed to entrench one on the other; the interest on loans shall not exceed 7 per cent, and the bank has power to issue notes according to the provisions of the now existing banking law; (5) to grant to the National Government the free use of all ways of traveling and communication that it may construct; (6) to grant, after four years of cultivation, to each family a house of the colony and to each colonist 3 hectares of the 6 hectares (14.8 acres) which shall have been allotted to him for cultivation; (7) to deposit in the Bank of England, as a guaranty for the execution of this contract, and within three months from the date on which the same shall be approved by the National Congress, the sum of 200,000 bolivars ($38,600), which shall remain there until the company establishes the above-mentioned bank in Caracas and settles the first five hundred families, and shall be forfeited to the Government of Venezuela in the event of the company failing to execute their contract.

On the other hand, the Government undertakes (8) to grant to the company uncultivated land for the immigrants (of not less than 10 years of age) at the rate of 6

hectares (14.8 acres) per head, and any child under 10 years of age brought into the country by an immigrant family shall, on attaining that age, be entitled to all the rights and privileges of an immigrant; (9) to make no future contract of this nature with any other individual or company who should wish to bring agriculturists direct from Italy; (10) to permit the importation free of duty of agricultural implements and machinery used for manufacture of produce and construction of buildings and of all ways of communication, after the company has complied with the conditions imposed by law; (11) to grant to the company the preference (ceteris paribus) in the development of all mines discovered in lands adjoining the colonies, and in the establishment of means of communication between the colonies and with other parts of the Republic; (12) to pay to the company the sum of 18 bolivars ($3.47) annually during the term (fifteen years) of this contract, for each immigrant of 7 years of age and upwards brought into the country and attached to a colony.

The company undertakes (13) to sell to the National Government, whenever it is desirous of purchasing, all telegraph lines at a price to be arrived at by the appraisement of experts; (14) to transfer to the Government without indemnity the entire ownership of the said lines when they shall have been constructed forty years; to transfer to the municipality in which they shall be situated all telephone lines after fifty years, and to the National Government at the end of ninety years all railways, tramways, etc. The rates to be charged by the company for the use of all the above means of communication shall be settled by mutual agreement between the Government and the company.

As to the colonists, it is provided that they may engage in any branch of agriculture which they like best; but where the lands are suitable for the cultivation of wheat or of the vine, the colonists shall devote to that purpose a third part of the land allotted to them.

The Government reserves the right to enter into similar contracts with any other countries.

This contract is to endure for fifteen years from the time of the approval of Congress, and is prorogable for a like term and under the same conditions, unless it shall have been denounced before the commencement of the last year, or the society shall have failed to perform its obligations and the Government shall have drawn attention to the want of compliance with such conditions. It is also stipulated that if the society is desirous of introducing immigrants before Congress consents to the contract, it may do so, and the Government will furnish land under the present immigration law, and when Congress sanctions the contract it shall have the benefit of its provisions; but that if Congress should not sanction it, the Government will pay the passages of the immigrants in accordance with the provisions of the present law.

As is seen, this is an extensive and well-considered contract, which we hope Congress will ratify, for, as we have said, properly performed, it must result in enormous advantage to the country.

The Department is in receipt of a communication from Consul Plumacher, of Maracaibo, dated June 17, 1898, covering the same information and inclosing a copy and translation of the contract.

NOTES.

American Dried Apples in France.—Consul Brittain, of Nantes, under date of July 8, 1898, says:

In a communication to the Department of State some months ago,* I made brief mention of the possibility of extending the market for American dried apples in this part of France, or rather in Brittany. I have since made a more thorough investigation, and find during the past year upwards of 12,000 barrels were received by the merchants of Nantes. These apples are chopped into slices just as they come from the trees, including stems, seeds, and skins. After being dried or evaporated, they are packed into barrels ready for shipment. They are used here for making cider. The apples are soaked in water, to which a little sugar is added. They retail for from 16 to 18 centimes a kilogram, which is a little more than 7 cents a pound. In nearly every grocery in Nantes, one can find these American dried apples for sale. Owing to the light crop in France last year, there was no doubt a special demand for the foreign product; but from present indications, there will not be more than half a crop here this season. I forward samples of dried apples from Germany, which are also used in making cider; but they are very inferior to the American product, which is much preferred. The merchants of the United States can make shipments in cargo lots direct to St. Nazaire and Nantes, which would place the goods on the market here at a much lower price than by sending them to Havre and having them reshipped thence.

German Imports and Exports.—Consul Monaghan writes from Chemnitz, June 1, 1898:

The total imports for the first four months of 1898 were 12,262,410 tons (of 2,204.6 pounds), against 11,212,363 tons for a like period in 1897, an increase of 1,050,047 tons. Wood shows a gain of 319,490 tons; coal, of 317,974 tons; drugs, etc., of 206,238 tons; earths, clays, etc., of 145,741 tons. In groceries, etc, there was a loss of 91,200 tons; in rice, because of bad harvests in Japan, a decrease of 127,285 tons.

* See CONSULAR REPORTS No. 212 (May, 1898), p. 106.

The total exports for the first four months of 1889 amounted to 9,252,496 tons, against 8,293,256 tons in the same period of 1897. The largest increase is in coal (561,232 tons), then grain (159,984 tons), earths, clay, etc. (123,031 tons), and iron and ironwares (109,481 tons). Groceries, because of a falling off in sugar, show the greatest decline, viz, 148,120 tons.

Under date of April 15, Consul Monaghan says:

Germany's imports from France during recent years have increased so extraordinarily as to call for serious comment. Since France increased her import duties in 1892, Germany's exports thither have steadily fallen. In 1892, the imports from France to this Empire in excess of exports thither were not less than $7,100,000. The articles to which this increase is due are ethereal or essential oils, tanning materials, leather goods, varnishes, bicycles, machinery, horses, wool, silk, hats, wines, preserves, cheese, etc. Every effort is being made by the French to hold this market. Sample rooms have been opened in large German cities. The manager and those under him are to take orders, distribute circulars in different languages, give information, etc. The system is commendable. It is not unlike the plan proposed by United States Consul Warner, of Leipsic.*

Germany's Machinery Exports.—The following has been received from Consul Monaghan, dated Chemnitz, June 22, 1898:

Russia is the best buyer of machinery from this Empire. In 1897, however, exports of machinery to that country decreased. This year a favorable reaction is being recorded in exports to Russia as well as in shipments of machinery in general. In the quarter January to April, there were exported 36,696 double hundreds (220 pounds) in locomotives, against 33,167 double hundreds for the same period in 1897. Cast-iron machines amounted to 405,904 double hundreds in 1898 against 347,910 double hundreds in 1897, and wrought-iron machines to 87,054 double hundreds in 1898 against 64,596 in 1897. The export of locomotives has not increased, thus far, in 1898 over the same period of 1897; but cast-iron and wrought-iron machines have, the former reaching 84,000 double hundreds, the latter advancing from 9,160 double hundreds in 1897 to 16,895 double hundreds in 1898. Belgium, Denmark, Austra-Hungary, and Roumania bought largely of locomotives, and the Transvaal, Dutch India, France, England, Italy, Austria-Hungary, Sweden, and Switzerland were among the Empire's customers of machinery. It is in eastern, Rus-

*See CONSULAR REPORTS No. 211 (April, 1898), p. 585.

sian, and South American markets that we must make our greatest efforts to meet Germany. We should improve our transportation facilities to South America and inaugurate an energetic policy of making foreign markets.

The World's Export Trade.—Consul Morris, of Ghent, under date of June 14, 1898, says:

An article published by the Antwerp Journal of Maritime Interests gives the official figures of the export trade of the leading nations of the world for 1896 as compared with 1872. Tabulating the statements therein contained, we obtain the following table:

Countries.	Amount of exports.		Increase.	Relative rank.	
	1872.	1896.		1872.	1896.
England	$1,235,200,000	$1,422,000,000	$207,475,000	1	1
United States	430,583,000	1,050,692,000	620,109,000	4	2
Germany	559,700,000	994,156,000	384,456,000	3	3
France	726,066,000	656,393,000	*69,673,000	2	4
Russia	270,586,000	513,908,000	261,322,000	5	5
Austria-Hungary	250,900,000	369,016,000	118,116,000	6	6
Belgium	193,000,000	283,324,000	90,324,000	7	7

* Decrease.

The most remarkable feature of this statement is the decrease in the trade of France, which has fallen from second to fourth place. The trade of the United States, on the contrary, increased more rapidly than that of any other country, or nearly 150 per cent in the twenty-five years.

Besides the countries mentioned, Japan, Australia, and the East Indies have, in greater or less degree, increased their exports. France alone sees its trade gradually declining in the volume of the world's commerce.

Employment of Women in Europe.—Consul Liefeld writes from Freiburg, under date of June 29, 1898, that the German Government is following the example of America and England and employing women in the post-office department. The experiment of using them as clerks and directors of smaller post-offices has been satisfactory. The department is now going a step farther, and is appointing women assistants in the telegraph and telephone offices. A great many women have also been appointed to take full charge of smaller post-offices, preference being shown to the widows and daughters of deceased postmasters. Those who have been in the

employ of the Government a long time are to receive a salary of 1,200 marks ($285) per year, with an extra allowance of 500 marks ($119) for house rent.

On July 14, 1898, the consul adds:

In Norway women have for some time been employed in the railroad and post-office service, and are now receiving appointments as supervisors of the railroad stations. They receive the reports from the train conductors, answer the many questions of travelers in German or English, call out the trains in the waiting rooms, ring the station bell at the departing of the train, and telegraph its departure to the next station. They perform the duties of Government telegraph operators, and often those of postmasters and baggage men.

Passports Required of Heidelberg Students.—The following, bearing date of July 8, 1898, has been received from Consul Hoffman, of Mannheim:

I have the honor to convey herewith an item of information which, I trust, may be made public, in order that delay and possibly annoyance may be spared those persons who come abroad with the intention of studying at the University of Heidelberg.

Although passports are not ordinarily required of Americans visiting southern Germany, it may be well to inform those who contemplate matriculating at the university that they must provide themselves with a passport before leaving the United States. The delay occasioned in procuring one through this consulate is very slight, but the applicant may have difficulty in presenting satisfactory documentary evidence or producing reputable witnesses to establish his identity. The university will not permit foreigners to matriculate unless a passport be placed on file with the secretary.

Congress of Orientalists in Italy.—The following note addressed to the Secretary of State, bearing date of Washington, July 9, 1898, has been received from the Italian embassy:

On the occasion of the eleventh International Congress of Orientalists, which was held at Paris, the city of Rome was designated as the place of meeting for the congress to be held in the year 1899.

The Royal Government, having gladly accepted this designation, has assigned to me the pleasing task of addressing to the Federal Government, in the name of the committee of arrangements, a formal invitation to take part in the aforesaid congress, and has expressed the hope that it will be represented by a number of delegates of

such a character as will be suited to the precedents of the congress and the importance which oriental studies have recently assumed.

I consequently have the honor to communicate the foregoing to Your Excellency, and I shall be grateful to you if you will be pleased to make known to me the reply of the Federal Government. In case that reply is affirmative, as I trust it will be, I beg Your Excellency to give the widest publicity to the announcement of the meeting of the next congress, and to recommend the participation of such institutes, scientific bodies, and men of learning as are interested in the subject in question, and to request them to send papers of a nature to interest orientalists.

I will hereafter send you a list of the institutes in the United States that were represented at the last congress, and whose participation would be particularly desirable.

I await, etc., FAVA.

Irish Mackerel Fishery.—Consul Swiney writes from Cork, June 2, 1898:

Mackerel fishing in Ireland is practically confined to this district, on the coasts of counties Cork and Kerry, and is done in the spring and autumn. The fish taken in the spring are generally sent to the English market fresh; but, owing to the present demand in the United States, those caught this spring are being largely cured for that market. The mackerel cured in Ireland in 1897 amounted to about 40,000 barrels, nearly all being sent to the American market. The autumn fishing is principally done near shore by small six-oared boats, of which there are some 1,600 engaged. Besides these, there were, last year, of large boats, 24 English, 6 Scotch, 195 Manx (Isle of Man), and 93 French.

The development of the mackerel-curing industry on the south-west coast of Ireland is one of the greatest boons that could have come to the country. On the coasts of Cork and Kerry alone, about £30,000 ($145,995) is paid each year, between the months of August and December, as wages to the families of the fishermen, and about £100,000 ($486,650) to the fishermen for fish. When it is remembered that this money is put into circulation in a very poor district, it can easily be seen to be a boon to the poor people which can not well be overestimated.

Hops in Russia.—Under date of June 16, 1898, Consul-General Holloway sends from St. Petersburg a report on the harvest of hops in Russia in 1897. It appears that the season has been favorable. At the close of 1896, says the consul-general, the unsold hops represented one-third of the harvest; at the end of 1897, there remained

only one-tenth. The average price at the end of the past year was higher than that for 1896 by $4.57 per 36 pounds on the best quality of hops, and by $1.03 on the second grade. The Russian hop-growing industry is acquiring a firmer footing. Local dealers in the region of production are being supplanted by agents of large foreign firms, who wish to buy direct from the growers. The production is distributed as follows: Volyn region, 2,700 tons; western governments, 1,260 tons; Guslitsy region, 900 tons; Baltic region, 270 tons; remaining provinces, 630 tons.

A syndicate of hop growers, continues Mr. Holloway, has been established at Warsaw, the object being to develop the trade. During the past year the Government has given special attention to this industry. In 1896, the organization of cooperative companies of hop growers was considered, and this will probably be carried out. It is claimed that if England, with poor land, produces 27,000 tons of hops annually, Russia should raise double that quantity. The full text of the consul-general's report has been transmitted to the Department of Agriculture.

Hops in Bavaria.—Consul Nusbaum writes from Munich, May 26, 1896:

The territory used for hop culture in Germany in 1896 amounted to 40,699.8 hectares (100,569.2 acres), and in Bavaria alone to 25,301.86 hectares (62,520.9 acres).

The following table gives the most important districts in which hops are cultivated in Bavaria:

District.	Area.	
	Hectares.	*Acres.*
Hersbruck-Lauf	3,489.7	8,623
Mainburg-Rattenburg	2,177.5	5,380.6
Pfaffenhofen	2,147.7	5,307
Markterlbach-Neustadt-an-der-Aisch	1,927.9	4,763.8
Roth-Spalt	1,653.7	4,086.3
Abensburg	1,649	4,074.6
Mirnberg-Fürth	1,453.3	3,591.1

Beet Crop of Russia in 1897.—The following extracts are from the report of Consul-General Holloway, of St. Petersburg, dated May 24, 1898, the original of which has been transmitted to the Department of Agriculture:

According to information furnished by the collectors of excise duties, the total harvest of beets in European Russia in 1897 amounted to 6,559,727 tons, as against 6,376,180 tons in 1896, an increase of 2.9 per cent.

The harvest increased in the southwestern region by 361,267 tons, or 10.4 per cent; in the Vistula region, by 48,433 tons, or 6.1 per cent; in the central region the harvest decreased, as compared with 1896, by 226,148 tons, or 10.8 per cent.

The average crop per dessiatine (2.7 acres) decreased in European Russia 9 per cent, especially in the central and southwestern regions; in the Vistula region the average crop per dessiatine increased 0.3 per cent. In the southwestern region, the harvest increased only because of the increase of the area under cultivation. In the central region the crop was smaller than last year, notwithstanding the increase in area.

Russian Merchant Marine.—Under date of June 2, 1898, Consul Smith, of Moscow, writes:

A Government commission was recently appointed to report on the Russian commercial marine. It stated that Russia loses yearly about $37,000,000 through not having a sufficient commercial fleet of its own, and no progress seems to be made toward increasing the same. Companies from Lübeck, Hamburg, Denmark, England, France, and Norway have already established agencies on the Baltic Sea and Arctic Ocean, and nearly all the goods shipped from St. Petersburg and the Baltic ports to Odessa and the Black Sea is done by ships of other nations. One remedy suggested is the removal of duty on vessels built abroad for Russia; another is the admission, free of duty, of all material necessary for building vessels. It was decided that some steps should be taken in the near future to increase the commercial marine.

Firearms in Liege.—Consul Gilbert, of Liege, under date of May 16, 1898, writes:

The following table shows the number and description of firearms tested at the proving station in Liege for the years named:

Description.	1894.	1895.	1896.	1897.
Guns:				
Double barrel	198,780	227,432	224,071	208,301
Single barrel	266,713	330,776	300,264	315,144
Flintlocks	27,052	18,460	18,680	13,146
Military rifles	130,696	74,255	80,410	50,628
Revolvers	388,450	407,612	416,681	436,166
Pistols:				
Pocket, by pairs	2,515	600	1,031	761
Cavalry, by pairs	25,559	28,581	22,711	13,341
Total	1,039,765	1,082,716	1,063,848	1,037,487

The official value of firearms exported from Liege to foreign countries during the year 1896 was $3,160,713; during 1895, $2,960,000; in 1894, $2,500,000; which shows an increase of more than 25 per cent in two years. The importations of firearms into Belgium from all countries in 1896 were to the value of $312,000, and consisted almost entirely of old military rifles.

Gun barrels are subjected to three proofs for black powder and four for smokeless powder.

Agricultural Credit Loan Act in Canada.—Under date of June 4, 1898, Consul Smith, of Victoria, transmits a copy of the law in regard to agricultural credit associations, an account of which, as proposed, was embodied in a previous report.* The principal changes in the act as passed are: No member shall be allowed to hold more than one hundred and fifty shares in the association; no loan shall be made to any member of an amount exceeding two-thirds of the nominal value of his shares; and no association shall borrow, receive, take, or retain (otherwise than by deposits made by members) more than two-thirds of the amount of shares actually subscribed (the original draft read "any greater sum than the aggregate amount of the shares"). The act further provides that members must furnish statements of their debts to the managing committee; that officers shall be exonerated from responsibility as to the liabilities of the association (except such as they may incur by reason of shares held by them), unless default or neglect on their part is shown. The lieutenant-governor may guarantee the payment of the debentures of any association, or, pending the issue of debentures, may advance money to the association upon such terms as he may think fit. Also, according to the amended legislation, in the event of winding up, the reserve fund, after payment of liabilities of the association, shall be deposited in the treasury of the province, to form part of the agricultural credit association's guaranty fund, and shall be applicable toward payment of any loss that the Government may have incurred.

Freight Rates on Canadian Pacific.—Consul Ledoux writes from Three Rivers, July 21, 1898:

The Canadian Pacific Railway has put the following special freight tariff on its Ontario division, in connection with the Galt, Preston, and Hespeler Road, the Toronto, Hamilton, and Buffalo,

* See CONSULAR REPORTS No. 214 (July, 1898), p. 340

the Michigan Central, the Erie and Huron, and the Lake Erie and Detroit River Road.

On grain and grain products to West St. John, New Brunswick, when consigned through to ports of call of the Seeley Packet Line, the rates per 100 pounds from the principal shipping points are: Toronto, Peterboro, Hamilton, Brampton, Guelph, Galt, Woodstock, London, Ingersol, St. Thomas, Chatam, Windsor, Preston, Hespeler, Welland, Brantford, Niagara Falls, Tilsonburg, Sarnia, Walkerville, Port Stanley, 14 cents; Wallaceburg, 15 cents; Fergus, Elora, 16 cents; Cardwell Junction, 16½ cents; Mount Forest, Harriston, 17½ cents; Wingham, 18 cents; Owen Sound, 18½ cents.

I am informed that a rate has been authorized by the Joint Traffic Association on corn in carloads from Chicago, Milwaukee, and other points, taking Chicago rates to St. John, New Brunswick, Halifax, Nova Scotia, and other points on the Intercolonial Railway, of 29½ cents per 100 pounds, with the usual difference on traffic from Milwaukee or breaking bulk across Lake Michigan.

Bicycles in Colombia.—In a letter addressed to an export firm of New York, dated June 1, 1898, Consul Shaw, of Barranquilla, says that bicycles are but little used in that city, and there has been but little increase in the trade of late. The country, he says, is practically without roads, the streets being sandy in dry weather and soft in the rainy season. There are no domestic manufacturers in this line, and wheels are kept by dealers in hardware and general merchandise. Wheels come chiefly from the United States, although products of other countries are seen. At the time of writing, says Mr. Shaw, there was an agent from Italy in the city with a bicycle known as the Coronato; he had, however, made no sales. The best way to introduce United States wheels, continues the consul, is to open an agency with a good line of low-priced bicycles; repairs should also be done, as there is a lack of work in this line. The duty on imported wheels is 70 centavos (23 cents) per 2.2046 pounds. Colombian business men are accustomed to long credits—six, nine, and twelve months. Horseback riding is the favorite pastime for young men. A horse costs 200 pesos ($66) and can be kept for about $5 per month.

Matches in Paraguay.—Consul Ruffin sends the following from Asuncion, under date of May 31, 1898:

There are two factories in Asuncion, the matches being chiefly of wax. The factories are not large, and I presume do not supply

the demands of the country. Very liberal concessions are made by the Government to this industry.

The wax matches retail at 1½ cents gold per small box; the wooden ones at about five-sevenths of a cent gold.

During the year 1897, there were imported 5,981 kilograms (13,158 pounds) of wooden matches, representing an official value of $1,498 gold; the custom-house tax thereon being 25 per cent ad valorem. They came chiefly from Sweden. The importation of wax matches is insignificant.

It would be a little difficult at the beginning to compete with domestic factories, but I believe our matches could win a place in this market.

I am indebted for the information above given to the chief of the statistical bureau of Paraguay.

Mandioca in Paraguay.—Consul Ruffin writes from Asuncion, May 2, 1898:

Mandioca is a product peculiar to tropical or semitropical regions. It is something like the sweet potato, except that it is not as sweet, but is more starchy. No product of the soil is more universally used in Paraguay. Every family, rich or poor, has it upon the table. It is usually cooked with meat, together with corn, sweet potatoes, and other vegetables. This constitutes the national dish. It is also used in making starch, corn starch not being known.

Mandioca is light brown in color and is 1½ to 2 feet in length, with a diameter of 1 to 1½ inches. It is planted in May, and during the winter months (June, July, and August) it is in the best condition to be marketed, although it grows throughout the year.

For 5 cents gold enough mandioca can be bought to furnish the substantial part of a meal for five or six persons. The Agricultural Bank, a Government institution, has entire charge of the farming interests of the Republic.

The crop this year is good. Modern agricultural methods and machinery have been introduced with gratifying results. United States machinery would, if its efficiency were generally known revolutionize agriculture in Paraguay.

Agriculture in Paraguay.—Consul Ruffin writes from Asuncion, May 31, 1898:

The people are beginning to awake to the necessity of agricultural development. The farmers are widely scattered and there is a

growing sentiment in favor of centralization and of heavy foreign colonization.

The Government, through the Agricultural Bank, gives to each farmer $300 paper (amounting to $35 or $40 in gold) in the form of a loan on the property. It is urged in behalf of the class which does not own property that the Government purchase large tracts of arable land, let them to the farmers, and give them farming implements, seeds, etc. There is much enthusiasm on the part of the promoters of this plan.

Kerosene in Paraguay.—Consul Ruffin, of Asuncion, on May 2, 1898, says:

Paraguay is lighted with kerosene or coal oil imported from the United States. No electricity or gas is used other than that generated by private factories. Kerosene comes in 4-gallon tin cans, which form permits convenient storage in the boats plying between Asuncion and Montevideo, Uruguay.

It seems to me it would be more profitable to send tank steamers, which would reduce the cost and thereby increase the sales. The tanks could immediately be sold, because of the great demand in this line, thus obviating the expense of returning them.

Since the war with Spain, the price of oil has gone up nearly 50 per cent, and there is much speculation. The United States has a monopoly of oil imports, 40,648 gallons being imported in 1897, at a declared value of $19,511 gold. The duty is 25 per cent ad valorem.

Exports from Orange Free State.—Consul-General Stowe writes from Cape Town, April 25, 1898:

I give below a list of exports from the Orange Free State for the year 1897, in lines that include a few of the principal productions of the United States:

Articles.	Quantity.	Value.		Destination.
Cattle.....pounds...	45,037	£262,283	$1,274,695	Transvaal.
Eggs.....dozen...	449,929	26,795	132,923	Do.
Horses and mules.....number...	8,355	86,221	419,034	Do.
Meal and flour.....pounds...	12,260,810	98,006	476,309	Do.
Do.....do.....	67,087	241	1,171	Natal.
Do.....do.....	563,417	3,144	15,280	Cape Colony.
Sheep and goats.....number...	175,998	138,778	674,461	Transvaal.
Wheat.....pounds...	1,161,620	5,527	26,861	Do.
Do.....do.....	266,506	1,213	5,895	Natal.
Do.....do.....	98,409	14,036	68,215	Cape Colony.

Nearly all these exports, with the exception of cattle, sheep, eggs, and goats, came from the United States, and a certain portion from other countries. The American wheat was ground into flour. The horses, mules, and wheat simply passed through the Republic. Much of the cattle also came from other countries.

Telephones in Cape Colony.—Consul-General Stowe writes from Cape Town, April 25, 1898:

The telephone service of Cape Colony is under the control of the colonial government. On the 9th of April, 1898, there were 1,535 instruments in use, and the revenue for 1897 amounted to $66,137.22. There are 869 miles of wire and 780 subscribers. Seven exchanges in the colony work on the single-wire system, but arrangements are now being made to have all lines duplicated, and in future no exchange will be established except on the metallic-circuit system.

In the course of the next few months the underground cable system in Cape Town will be completed and exchanges established in the suburbs. I inclose a copy of the telephone regulations now in force in this colony.*

Petroleum Regulation in Cape Colony.—Consul-General Stowe sends the following from Cape Town, under date of June 1, 1898:

I have the honor to submit a new law or regulation of this colony of interest to manufacturers and shippers of petroleum:

Every case, tin, bottle, or other receptacle containing petroleum having a flashing point of 150° F. shall be clearly stamped or securely labeled with a legible notice or label printed in red letters of not less than 1 inch in height and of proportionate breadth, with the words "Caution—Petroleum spirit, highly inflammable; not to be used for lamps or oil stoves," and such notice or label shall be so affixed on the outside of every case, tin, bottle, or other receptacle that it may be easily observed by the purchaser.

As the United States has nearly the entire trade in petroleum in Africa, shippers should take notice.

South African Law Regarding Commission Agents.—Consul-General Stowe writes from Cape Town, June 1, 1898, that the law of Cape Colony, Natal, Orange Free State, and South African Republic relating to the consignment of goods from foreign manufacturers or their agents reads as follows:

Everyone commits theft, who, having received any money, valuable security, or other thing whatsoever, in terms requiring him to account for or to pay the same

* Filed for reference in the Bureau of Foreign Commerce, Department of State.

or the proceeds thereof to any other person, though not requiring him to deliver over, in specie, the identical money, valuable security, or other things received, fraudulently converts to his own use or fraudulently omits to account for the same, or to account for or pay any part of the proceeds which he was required to account for or pay as aforesaid: Provided, that if it be part of the said terms that the money or other thing received, or the proceeds thereof, shall form an item in a debt or account between the person receiving the same and the person to whom he is to account for or pay the same, and that such last-mentioned person shall rely only on the personal liability of the other as his debtor in respect thereof, the proper entry of any part of such proceeds in such accounts shall be decreed a sufficient accounting for of the part of the proceeds so entered.

Notes from China.—Vice and Deputy Consul Bandinel sends the following from Niuchwang, under date of June 8:

Rinderpest has broken out to a very great extent in the north among the pasture-fed cattle.

Great activity is being shown in this and the surrounding country by Russian and Chinese railway engineers.

The tax on grain measure, which was only 3 taels ($1.86),* has now been increased to 15 taels ($9.30); and it was decided at a meeting of all the merchants, held yesterday, to petition the officials to mitigate this impost.

Duty on Grain Suspended in Korea.—Consul-General Allen writes from Seoul, under date of June 3, 1898:

Owing to the scarcity of rice in Korea at present, the Government on May 27 announced its intention to suspend the import tax on rice and other grain for a period of five months. On account of the recent heavy imports of Saigon and other rice into Japan, the price there has fallen, so that there is no further demand for Korean rice, and the price here is expected to fall soon. The high price is believed by good authorities to be chiefly due to speculation. There has recently been a large import of rice and millet from China into Chemulpo, and the present supply will probably be adequate till the new crop comes in. The prospects for good crops for the present year are very fair. All depends upon the rains, which have been scanty so far.

Perfumery Imports into Japan.—The consul-general at Yokohama, Mr. Gowey, in answer to a request from a New York export association, transmits the following information† under date of April 6, 1898:

The imports of perfumery and toilet preparations into Japan in

---

*The value of the Niuchwang tael, according to United States Treasury estimates, was 62 cents on April 1, 1898.

†Copy of which was forwarded to the association May 20, 1898.

1897 were: Musk, $39,314; perfumed waters, etc., $11,648; cosmetics, $26,596. The musk comes from China, and the other articles from Great Britain, Germany, France, India, and the United States. The musk imported is used in the manufacture of imitations of various foreign perfumes. The favorite cosmetic for the hair among Japanese women is made from camelia seeds. No tax is imposed upon foreign salesmen. United States firms who deal in this line of trade in Yokohama are: China and Japan Trading Company; American Trading Company; Messrs. Walsh, Hall & Co.; Messrs. Frazar & Co.

Wheat and Flour in Japan.—Consul Harris sends from Nagasaki, under date of April 25, 1898, the following table of imports of wheat and flour into Japan during the last three years:

Country.	1895.	1896.	1897.
Wheat.	*Pounds.*	*Pounds.*	*Pounds.*
United States	484,510	2,451,689	12,467,466
Korea	10,457	2,717,845	8,887,425
Other countries	94	82	2,949
Total	495,061	5,169,616	21,357,840
Flour.			
United States	13,866,970	31,408,311	31,094,810
Great Britain	3,097	250,357	1,724
British America	7,750	298,800	60,420
Australia	50,543	.....	49
China	229	.....	53,749
Hongkong	58,200	.....	2,500
Other countries	6,095	12,040	6,776
Total	13,992,824	31,969,508	31,220,028

Demand for Locomotives and Rolling Stock in Japan.—The following has been received from Consul Halstead, bearing date of Birmingham, July 8, 1898:

The London correspondent of the Birmingham Daily Post writes that he has received information from an influential quarter that very considerable contracts are to be given out by the Japanese Government for locomotives and rolling stock before the end of the year. He adds that locomotives, if they are to be built on the model of those now in use, would require to be very solidly constructed and capable of taking a heavy weight up steep gradients.

Demand for American Steel Plates in Europe.—Consul Halstead writes from Birmingham, July 8, 1898, that an English firm desires quotations on steel ship plates and boiler plates manufactured in the United States, in lots of about 400 tons each. The

trade of the firm is on the European continent, and the managers realize that, in the competition for that business, they must make American connections. Reference is made to the necessity of cheap freight rates from the point of manufacture to the seaport, and from the United States to Europe.

Flax Spinning in Cork.—Consul Swiney writes from Cork, June 14, 1898, in regard to a large spinning and weaving establishment in that city. The company employs 800 workmen, and spins flax grown in Russia, France, and Belgium, in addition to that produced in Ireland. This, adds the consul, is necessary in order to fill orders for different grades of yarn, the French flax being very fine, that from Belgium slightly heavier, while Russian flax is coarse and strong. The growth and manufacture of flax, says Mr. Swiney, has been carried on with success in different countries of Europe during many years, and it would seem that in the United States, with its infinite variety of soil and climate, this industry should flourish equally well. It is said by Cork manufacturers that America is their best market.

Exhibition of Machinery in Munich.—Consul Nusbaum, of Munich, under date of June 13, 1898, informs the Department that the second exhibition of power and labor machines was opened in that city on June 11. The exhibition, says the consul, is held on a very small scale. No Americans participated, and nearly all machines are of German make.

Consular Reports Transmitted to Other Departments.—The following reports from consular officers (originals or copies) have been transmitted since the date of the last report to other Departments for publication or for other action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
J. G. Stowe, Cape Town ...	June 10, 1898	Crops in South Africa	Department of Agriculture.
M. J. Burke, St. Thomas ...	July 13, 1898	Crop conditions in the district of Port Stanley.	Do.
M. H. Twitchell, Kingston	June 30, 1898	Agricultural conditions for June, 1898.	Do.
E. Schneegans, Saigon.....	May 10, 1898	Rice market.....	Do.
Do	May 26, 1898	.....do	Do.
J. S. Benedict, Campbellton	June 27, 1898	Crops.....	Do.
G. Beutelspacher, Moncton	June 29, 1898	Crop report.....	Do.
L. S. Hunt, Palmerston	July 27, 1898	Monthly report of crop condition.	Do.

FOREIGN REPORTS AND PUBLICATIONS.

British vs. Russian Trade in Persia.—An article in the Bulletin de la Société de Géographie Commerciale, Paris, Vol. XX, Nos. 4, 5, and 6, is summarized as follows:

A marked decrease is noted in the commerce of British India with Khorassan. In 1896–97, the value of the English exports from Bombay to Mashad was only some $437,900; less than half that of the preceding year. Tea and indigo were formerly the chief articles of export. In 1895, Bombay sent to Mashad $184,927 worth of tea; in 1896, only $53,532, and of this figure $3,796 represents the value of the tea sent to Russian territory. The same is true of indigo; the imports have fallen from $109,010 to $16,546. This condition of affairs is explained as follows:

(1) The customs regulations in force along the whole extent of the trans-Caspian frontier prohibit the admittance of European and British-Indian goods to the markets of Central Asia, with the exception of tea, indigo, muslin, spices, Indian shoes, precious stones, and coral; and these articles are subject to high duties.

(2) Russia has succeeded in having these articles transported by way of Batum, thus aiding the Trans-Caspian Railway.

(3) The Government of the Czar is trying to monopolize the commerce of eastern and southern Persia. Subsidies are granted to traders, good roads have been made in the trans-Caspian territory, consular agents are installed in several districts of Khorassan, and the emigration of Russian merchants to different points of the province is encouraged.

(4) The Russians trade only for cash, thus risking nothing, while the Indian merchants, following their ancient customs, give credit. The Russians are not only extending their traffic in the Khorassan; they have penetrated almost to the frontiers of India, so that in the very places where the English merchants ought to be masters of the market, Russian goods are sold. In addition, the Russians are doing their best to induce the Indian merchants established at Bokhara to give up all relations with Bombay and to buy the Chinese green tea, imported by the land route. To facilitate the sale of cotton goods, the Russian Government gives to exporters heavy bounties, sufficient to pay the cost of transportation, so that the cottons of Moscow and Nizhni Novgorod are sold in Kashgarie at the same price at which they are delivered from the manufacturers. Under such conditions, it is evident the Anglo-Indian merchants can not compete; and the Government of India will, it is probable, take steps to aid them.

The building of the Trans-Caspian Railway along the northeastern districts of Persia has been of the greatest advantage to Russia.

Economic Conditions in Siberia.—The following extracts are from a communication to the Bulletin de la Société de Géographie Commerciale, Paris, Vol. XX, Nos. 4, 5, and 6:

Until very recently, Siberia, so long unknown, has had an entirely artificial existence. The Russians themselves were almost as ignorant of its resources as the

outside world, and regarded it merely as a country of transit; they knew that goods from the Far East, especially teas, passed through it, meeting on the way some few European products and, above all, long trains of convicts and exiles. The work on the great Trans-Siberian Railway has been the first germ of the economic development of the country. Hitherto, Siberia has been inhabited only along the caravan route; a few miles on either side not the slightest trace of settlements or of cultivation could be found.

The caravan route extends from Mongolia to the Ural, with branch roads to the Amur, Lena, and Altaï. This road, like almost all others in Russia, has been made by the travel for centuries of men and animals; it is only a few years ago that the Government thought of keeping it in repair. Since then, villages have sprung up along the route, partly due to individual and partly to Government initiative.

The railway doubtless has affected this business of overland transport; but it is far from having injured it fatally, as the long files of wagons and sleighs, loaded with merchandise, passing parallel to the iron road, attest. There are two reasons for this—the high tariff of the railway, together with its still primitive organization, and the necessity for the peasants to find employment for their horses, especially during the long winter months.

The rivers afford the least expensive means of transportation, since boats have been forced by competition to lower their tariff. Unfortunately, the great Siberian rivers (except the Amur) flow from south to north. It has been proposed to unite them laterally by means of canals. The canal from the Ob to the Yenisei, not yet completed, follows the Kiète, a tributary of the Ob, for about 310 miles, then crosses a great lake, and by means of a cut nearly 5 miles in length joins a tributary of the Yenisei. This last river is reached about 155 miles north of Yenisséisk. When the innumerable rapids of the River Angara have been made navigable, the journey from Oust Kiakhta, on the Mongolian frontier, to Tioumen, at the foot of the Ural, a distance of 3,604 miles, will be made by way of the Sélenga, the largest tributary of Lake Baïkal, the lake itself, the Angara River, which unites the lake with the Yenisei, the Ob Canal, the Ob River, and lastly the River Irtych.

The third means of transportation is the railway. It was not projected for the development of Siberia, but to seek on the Chinese coast a port free from ice, which nature has refused to the Baltic Sea. This railway is actually finished as far as Tomsk. The first express left St. Petersburg the 1st of April, 1898, composed of eight cars (sleeping, parlor, and dining cars), lighted by electricity and heated by steam. Two trains a month are expected to make the distance, 1,939 miles, in six days. Singularly enough, this railway, which was not considered a commercial enterprise, has proved of great benefit to trade. Except troops and criminals, it was feared that there would be few passengers; the truth is that the number of trains might be doubled or tripled, as thousands of tons of merchandise are waiting for transportation. The road to Krasnoiarsk, the easiest of construction, is the most useful from a commercial point of view. In consequence of the development of traffic, the Russian Government has established a custom-house at Iruktsk, through which the teas and silks from the Far East must pass.

Cereals grow abundantly in Siberia, and this trade is in the hands of the English and is carried on chiefly by the great rivers and the Arctic Ocean. Russia protects herself against Siberian grain by heavy railroad freight rates.

Frozen meat is sent to St. Petersburg; wools, tallow, butter, sheepskins, leather, and furs are also exported. Valuable furs are not found, however, in the radius of the railway.

The mineral productions include salt, gold, iron ore, coal, and plumbago. Copper and other metals are mined on a very small scale. Iron and coal are found

everywhere; gold is also so universal that it might be called a Siberian specialty. In the basin of the Lena, and in all of the northeastern part of Siberia, there are said to be beds so rich that they might rival those of Alaska. Salt is unequally distributed; it abounds in western Siberia. In the district of Akmolinsk, on an average seven or eight out of every ten borings yield salt water.

The commercial relations of Europe with Siberia are capable of great expansion. It is a country where time has no value and whose people have no expensive tastes. The provinces of the Amur and of the seacoast are considered by Russia of great importance. They have been colonized officially, at great expense; and for a long time all foreigners, unless naturalized, were forbidden the acquisition of real estate. Recently, these regulations have been changed; the doors of this colony are open, and the influx of foreign capital is favored. All the trans-Baïkal region and the basins of the Amur and Lena are free from duty. Sugar, tobacco, wine, and alcohol alone pay duty at Vladivostock or Nicolaevsk. To gain this market, we should send representatives to study conditions, and a direct line of steamers should be established. Up to the present time the Germans, Americans, and English alone have profited by this market.

Railways in China.—The Revue du Commerce Extérieur, Paris, July 16, 1898, gives the following list of railways in China now in operation or in course of construction, as well as those for which concessions have been granted by the Chinese Government:

(1) Line from Shanghai to Woosung, completed in 1873, but abandoned afterwards on account of the opposition of the people.

(2) Line from Tientsin to Shen haï Kwang (at the eastern extremity of the Chinese wall). This is nearly 173 miles long and has been in operation since 1890; it will be extended to Vladivostock and connect with the Trans-Siberian Railway.

(3) Line projected from Stretensk, in the trans-Baïkal government, to Vladivostock, traversing Manchuria.

(4) Line from Pekin to Tientsin, 79½ miles long, opened to traffic in May, 1897.

(5) Line projected from Pekin to Hankau, granted to a Franco-Belgian syndicate. The town of Hankau has a population of about 3,000,000.

(6) Line projected from Pekin to Toï-Yuen, the capital of the province of Showsin. This line will have a total length of 279½ miles, and will open up the southwestern part of the Empire.

German Interests in Guatemala.—The Moniteur Officiel du Commerce, Paris, March 31, 1898, says:

For years, the exports of Guatemala have far exceeded the imports. In 1896, they represented a sum of 23,085,000 piasters ($11,373,980), against 9,143,000 piasters ($4,503,756) in imports. The situation at first sight would appear to be advantageous to Guatemala, and yet the annual deficits show the contrary. This abnormal situation is due to the fact that most of the large coffee plantations belong to German stock companies, and the profits produced by the capital employed go to Germany under the form of dividends. German interests in Guatemala are valued at more than 150,000,000 marks ($35,700,000). The number of German inhabitants does not exceed 500.

CONTENTS.

		Page.
I.—Trade Conditions of Egypt	*Harrison*	161
II.—The Caracas Warehouse	*Goldschmidt*	176
III.—The Quest for Export Markets	*Mason*	187
IV.—New Fields for United States Manufactures	*Griffin*	191
V.—American Manufactures Abroad	*Stowe*	193
VI.—United States Shoes in England	*Halstead*	194
VII.—Outlook for American Manufactures in Munich	*Nusbaum*	195
VIII.—American Goods in Switzerland	*DuBois*	196
IX.—California Wines in Belgium	*Gilbert*	198
X.—Foreign Blending Wines in Germany	*Stern*	199
XI.—Trichinæ: German Inspection of Hog Products	*Barnes*	200
XII.—The Colonies and Protectorates of France	*Gowdy*	203
XIII.—Subsidies of the French Line of Steamers	*Thackara*	209, 312
XIV.—Electric Lights in Brussels	*Roosevelt*	213
XV.—Russian Petroleum Industry	*Holloway*	214
XVI.—Utilization of Indian-Corn Stalks in Russia	*Holloway*	216
XVII.—Cartage in London	*Osborne*	217
XVIII.—British Steel Tubes for the United States	*Halstead*	218
XIX.—Machinery Prize Competition in Italy		219
XX.—The Commercial-Traveler Tax in Switzerland	*Frankenthal*	220
XXI.—Cheap Railway Rates in Switzerland	*Frankenthal*	222
XXII.—Industries in Breslau	*Erdman*	223
XXIII.—Wages in Breslau	*Erdman*	224
XXIV.—German Exports to the United States	*Mason*	225
XXV.—Exports of German Aniline Colors	*Stern*	226
XXVI.—The Lumber Trade of Belgium	*Morris*	227
XXVII.—Industrial and Commercial Conditions in Uruguay	*Swalm*	237
XXVIII.—Harbor Improvements in Montevideo	*Swalm*	239
XXIX.—Coal in Venezuela	*Goldschmidt*	240
XXX.—The Argentine Wheat Market	*Mayer*	241
XXXI.—Piracy near Maracaibo	*Plumacher*	242
XXXII.—Smelting Works in Mexico	*Pollard*	243
XXXIII.—Copyright Law of Mexico	*Barlow*	244
XXXIV.—Duties in Guadeloupe: Scarity of Meat	*Aymé*	245

		Page.
XXXV.—Modifications of Canadian Tariff	*Turner*	246
XXXVI.—Canadian Customs Regulations for Sporting Outfits	*Turner*	248
XXXVII.—Harbor and Railway Improvements in Ontario	*Burke*	249
XXXVIII.—Bicycles in Ontario	*Burke*	251
XXXIX.—Market for Cattle and Horses in Canada	*Dudley*	252
XL.—Canadian Cheese	*Culver*	253
XLI.—Canned Meats in Madagascar	*Gibbs*	254
XLII.—Japanese Harbor Regulations for Open Ports	*Buck*	255
XLIII.—Electric Railways in Shanghai	*Goodnow*	260
XLIV.—Mining and Railway Concessions in China	*Denby*	260
XLV.—Regulations for Inland Navigation in China	*Denby*	261
XLVI.—Watch Trade in Japan	*Frankenthal*	263
XLVII.—Quinine in Java	*Everett*	266
XLVIII.—Cigarettes in Korea	*Allen*	268
XLIX.—Industries in the New Hebrides	*Wolff*	270
L.—American Furniture in England	*Boyle*	271
LI.—American Salesmen in Europe	*Halstead*	275
LII.—Industrial Enterprises in Spain	*Mertens*	277
LIII.—Calcium Carbide and Acetylene in France	*Thackara*	279
LIV.—A New German Commercial Bureau	*Monaghan*	280
LV.—Railways in Colombia	*Madrigal*	281
LVI.—Bicycle Industry in Germany	*Monaghan*	283
LVII.—Bicycles in Aden	*Cunningham*	284
LVIII.—American Competition in England	*Halstead*	285
LIX.—Bicycles in Mexico	*Pollard*	286
LX.—German View of the Results of the War	*Mason*	287
LXI.—The Shansi Concession	*Ragsdale*	289
LXII.—Commercial Conditions of Zanzibar and East Africa	*Billheimer*	292
LXIII.—Laws Governing the Manufacture of Glucose	*Roosevelt*	294
LXIV.—Leather in Cape Colony	*Stowe*	297
LXV.—Suez Canal Traffic	*Watts*	298
LXVI.—Notes (Commerce of France in 1898—The Staffordshire Potteries—Electric Street Railways in Europe—The World's Wine Production—Agricultural Conditions in Bermuda—Japanese Steamship Service—Trade of Japan in 1898—Chinese Decree as to Railway Construction—An American Civil Engineer in Korea—Effect of Plague on Calcutta Jute Industry—Coffin Furniture in Australia—Tax on Commercial Agents in Kongo Free State—Bicycle Trade at Tunis—Flour Mill at Nantes—Swiss Exports to the United States—French Duty on Staves and Barrel Heads—Telegraphy Without Wires in		

Page.

Belgium—International Sugar Conference—Aphthous Stomatitis in Belgium—Export of Wheat Prohibited in Turkey—Tariff Increase in Guatemala—Uruguayan Tariff Committee—Foreign Debt of Nicaragua—American Mining Enterprise in Haiti—Demand for Coal by Brazilian Government—Coal Imports into Brazil—Market for Smoked Meats in Canada—Exporting Raspberries from Canada—Distress in the Klondike—Commercial Institute in Vladivostock—Camphor in Japan—Japanese Silk Exports—Freight Rates for South African Exhibition—Vehicles in Cape Colony—Russian Petroleum for Spain—Subsidies of the French Line of Steamers (Correction)—Consular Reports Transmitted to Other Departments) 299

LXVII.—Foreign Reports and Publications (Commercial and Industrial Conditions of the Philippines—Traffic in Panama in 1895 and 1896—Diamond Exports from South Africa—Foreign Capital in Japan—Finances of Spain)..... 313

REPORTS BY COUNTRIES.

	Page.
ADEN:	
Bicycles in	284
ARGENTINE REPUBLIC:	
The Argentine wheat market	241
AUSTRALIA:	
Coffin furniture in	304
BELGIUM:	
Aphthous stomatitis in	307
California wines in	198
Electric lights in Brussels	213
Laws governing the manufacture of glucose in	294
Lumber trade of	227
Telegraphy without wires in	307
BERMUDA:	
Agricultural conditions in	301
BRAZIL:	
Coal imports into	309
Demand for coal by Brazilian Government	309
BRITISH INDIA:	
Effect of plague on Calcutta jute industry	304
CANADA:	
Bicycles in Ontario	251
Canadian cheese	253
Canadian customs regulations for sporting outfits	248
Exporting raspberries from	310
Modifications of Canadian tariff	246
Harbor and railway improvements in Ontario	249
Market for cattle and horses in	252
Market for smoked meats in	309
CHINA:	
Chinese decree as to railway construction	303
Electric railways in Shanghai	260
Mining and railway concessions in	260
Regulations for inland navigation in	261
The Shansi concession	289
COLOMBIA:	
Railways in	281
Traffic in Panama in 1895 and 1896	316
DUTCH INDIA.	
Quinine in Java	266
EAST AFRICA:	
Commercial conditions of Zanzibar and	292
EGYPT:	
Suez Canal traffic	298
Trade conditions of	161

EUROPE: Page.
American salesmen in ... 275
Electric street railways in ... 300
International sugar conference ... 307
FRANCE:
Calcium carbide and acetylene in ... 279
Commerce of, in 1898 ... 299
Colonies and protectorates of ... 203
Flour mill at Nantes ... 306
French duty on staves and barrel heads ... 307
Subsidies of the French line of steamers ... 209, 312
GERMANY:
A new German commercial bureau ... 280
Bicycle industry in ... 283
Exports of German aniline colors ... 226
Foreign blending wines in ... 199
German exports to the United States ... 225
German view of the results of the war ... 287
Industries in Breslau ... 223
Trichinæ: German inspection of American hog products ... 200
Wages in Breslau ... 224
GUADELOUPE:
Duties in: Scarcity of meat ... 245
GUATEMALA:
Tariff increase in ... 308
HAITI:
American mining enterprise in ... 309
ITALY:
Machinery prize competition in ... 219
JAPAN:
Camphor in ... 310
Foreign capital in ... 317
Japanese harbor regulations for open ports ... 255
Japanese steamship service ... 302
Japanese silk exports ... 311
Trade of, in 1898 ... 302
Watch trade in ... 263
KLONDIKE:
Distress in ... 310
KONGO FREE STATE:
Tax on commercial agents in ... 305
KOREA:
An American civil engineer in ... 303
Cigarettes in ... 268
MADAGASCAR:
Canned meats in ... 254
MEXICO:
Bicycles in ... 286
Copyright law of ... 244
Smelting works in ... 243
NEW HEBRIDES:
Industries in ... 270

	Page.
NICARAGUA:	
Foreign debt of	308
PHILIPPINE ISLANDS:	
Commercial and industrial conditions of	313
RUSSIA:	
Commercial institute in Vladivostock	510
Russian petroleum for Spain	312
Russian petroleum industry	214
Utilization of indian-corn stalks in	216
SOUTH AFRICA:	
Diamond exports from	317
Freight rates for South African exhibition	311
Leather in Cape Colony	297
Vehicles in Cape Colony	311
SPAIN:	
Finances of	317
Industrial enterprises in	277
SWITZERLAND:	
American goods in	196
Cheap railway rates in	222
Swiss exports to the United States	306
The commercial-traveler tax in	220
TUNIS:	
Bicycle trade at	305
TURKEY:	
Export of wheat prohibited in	308
UNITED KINGDOM:	
American bicycle competition in England	285
American furniture in England	271
British steel tubes for the United States	218
Cartage in London	217
The Staffordshire potteries	299
United States shoes in England	194
UNITED STATES:	
American manufactures abroad	193
New fields for United States manufactures	191
Outlook for American manufactures	195
The quest for export markets	187
URUGUAY:	
Harbor improvements in Montevideo	239
Industrial and commercial conditions in	237
Uruguayan tariff committee	308
VENEZUELA:	
Coal in	240
Piracy near Maracaibo	242
The Caracas warehouse	176
WORLD:	
The world's wine production	301

Full directions for binding the Consular Reports are given in No. 131, page 663.

VALUES OF FOREIGN COINS AND CURRENCIES.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

These estimates "are to be taken (by customs officers) in computing the value of all foreign merchandise made out in any of said currencies, imported into the United States."

The following statements, running from January 1, 1874, to July 1, 1898, have been prepared to assist in computing the values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account that the ruble of Russia, for instance, has fluctuated from 77 17 cents in 1874 to 37.4 cents in April, 1897, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, and 1882 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz, (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—*Countries with fixed currencies.*

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange."

Countries.	Standard.	Monetary unit.	Value in U.S. gold.	Coins.
Argentine Republic*.	Gold and silver..	Peso.....	$0.96,5	Gold—Argentine ($4.82.4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†.....	Gold	Crown.....	.20,3	Gold—20 crowns ($4.05,2) and 10 crowns.
Belgium	Gold and silver..	Franc.....	.19,3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil.....	Gold	Milreis.....	.54,6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland).	.....do	Dollar.....	1.00	
Chile.....	.....do	Peso.....	.36,5	Gold—escudo ($1.25), doubloon ($3.65), and condor ($7.30); silver—peso and divisions.
Costa Rica.....	.....do	Colon.....	.46,5	Gold—2, 5, 10, and 20 colons; silver—5, 10, 25, and 50 centisimos.
Cuba	Gold and silver..	.....do	.92,6	Gold—doubloon ($5.01,7); silver—peso.
Denmark	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Egypt.....	.....do	Pound (100 piasters).	4.94,3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland.....	....do	Mark.....	.19,3	Gold—10 and 20 marks ($1.93 and $3.85,9).
France	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany	Gold	Mark.....	.23,8	Gold—5, 10, and 20 marks.
Great Britain.....	.....do	Pound sterling...	4.86,6½	Gold—sovereign (pound sterling) and half sovereign.
Greece.....	Gold and silver..	Drachma.....	.19,3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti	.....do	Gourde.....	.96,5	Silver—gourde.
Italy.....	.....do	Lira	.19,3	Gold—5, 10, 20, 50, and 100 lire silver—5 lire.
Japan‡.....	Gold.....	Yen.....	.49,8	Gold—1, 2, 5, 10, and 20 yen.
Liberia	.....do	Dollar.....	1.00	
Netherlands§.....	Gold and silver..	Florin	.40,2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland	Gold	Dollar.....	1.01,4	Gold—$2 ($2.02,7).
Portugal.....	.....do	Milreis.....	1.08	Gold—1, 2, 5, and 10 milreis.
Russia‖.....	.....do	Ruble.....	.77,2	Gold—imperial ($7.718) and ½ imperial ($3.80); silver—¼, ½, and 1 ruble.
Spain.....	Gold and silver..	Peseta.....	.19,3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway.	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Switzerland	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey	Gold	Piaster.....	.04,4	Gold—25, 50, 100, 200, and 500 piasters.
Venezuela.....	Gold and silver..	Bolivar.....	.19,3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

* In 1874 and 1875, the gold standard prevailed in the Argentine Republic.

† On reference to the table of "fluctuating currencies," it will be seen that Austria had the silver standard up to and including the quarter ended July 1, 1892. The next quarter (October 1) inaugurated the gold standard (see note under table of "fluctuating currencies").

‡ For particulars as to the change from silver to the gold standard, see CONSULAR REPORTS No. 201, p. 259.

§ The Netherlands florin, as will be seen in the "fluctuating" table, became fixed in value (40.2 cents) in 1880.

‖ For an account of the adoption of the gold standard, see Review of the World's Commerce, 1896-97, p. 254.

B.—*Countries with fluctuating currencies, 1874–1890.*

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver	Florin	$0.47,6	$0.45,3	$0.45,3	$0.41,3	$0.40,1	$0.39,8
Bolivia	do	Dollar until 1890; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America	do	Peso	.96,5	.91,8	.91,8	.83,6	.....	.....
China	Silver	Haikwan tael	1.61	1.61	.....	.....	.....	.....
Colombia	do	Peso	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador	do	do	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†	Gold	Pound (100 piasters).	.....	.....	4.97,4	4.97,4	4.90	4.90
India	Silver	Rupee	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan	Gold	Yen	.99,7	.99,7	.99,7	.99,7	.....	.....
	Silver		.....	.....	.....	.....	.87,6	.86,9
Mexico	do	Dollar	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands‡	Gold and Silver.	Florin	.40,5	.38,5	.38,5	.40,2	.....	.....
Peru	Silver	Sol	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia	do	Ruble	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli	do	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on Janury 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver	Florin	$0.39,3	$0.37,1	$0.35,9	$0.34,5	$0.33,6	$0.42
Bolivia	do	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America	do	Peso	.....	.....	.....	.69,9	.68	.85
Colombia	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†	Gold	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.94,3
India	Silver	Rupee	.37,8	.35,7	.34,6	.32,2	.32,3	.40,4
Japan	Gold	Yen	.....	.....	.99,7	.99,7	.99,7	.99,7
	Silver		.85,8	.81	.78,4	.75,3	.73,4	.91,7
Mexico	do	Dollar	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru	Silver	Sol	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia	do	Ruble	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli	do	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

* The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (see CONSULAR REPORTS, No. 147, p. 623) established the gold standard.

† The Egyptian pound became fixed in value at $4.94,3 in 1887.

‡ The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—*Quarterly valuations of fluctuating currencies.*

Countries.	Monetary unit.	1895. Jan. 1.	1895. April 1.	1895. July 1.	1895. Oct. 1.	1896. Jan. 1.	1896. April 1.	1896. July 1.	1896. Oct. 1.
Bolivia	Silver boliviano.	$0.45,5	$0.44,1	$0.48,6	$0.48,6	$0.49,1	$0.49,3	$0.49,7	$0.49
Central America.	Silver peso	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
China	Amoy tael								.79,3
	Canton tael								.79
	Chefoo tael	.70,4	.68,3	.75,1	.75,2	.75,9	.76,3	.76,9	.75,8
	Chinkiang tael								.77,4
	Fuchau tael								.73,3
	Haikwan tael	.74,9	.75,6	.80	.80	.80,8	.81,2	.81,9	.80,6
	Hankow tael								.74,2
	Ningpo tael								.76,2
	Niuchwang tael								.74,3
	Shanghai tael	.67,3	.65,2	.71,8	.71,8	.72,5	.72,9	.73,5	.72,4
	Swatow tael								.73,2
	Takao tael								.79,8
	Tientsin tael	.71,4	.69,2	.76,1	.76,2	.76,9	.77,3	.78	.76,8
Colombia	Silver peso	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
Ecuador	do.	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
India	Silver rupee	.21,6	.21	.23,1	.23,1	.23,3	.23,4	.23,6	.23,3
Japan	Silver yen	.49,1	.47,6	.52,4	.52,4	.52,9	.53,2	.53,2	.52,8
Mexico	Silver dollar	.49,5	.47,9	.52,8	.52,8	.53,3	.53,6	.54	.53,2
Persia	Silver kran			.08,9	.09	.09	.09,1	.09,2	.09
Peru	Silver sol	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
Russia	Silver ruble	.36,4	.35,3	.38,9	.38,9	.39,3	.39,5	.39,8	.39,2
Tripoli	Silver mahbub	.41,1	.39,8	.43,8	.43,8	.44,3	.44,5	.44,9	.44,2

Countries.	Monetary unit.	1897. Jan. 1.	1897. April 1.	1897. July 1.	1897. Oct. 1.	1898. Jan. 1.	1898. April 1.	1898. July 1.
Bolivia	Silver boliviano.	$0.47,4	$0.46,8	$0.44,3	$0.41,2	$0.42,4	$0.40,9	$0.41,8
Central America	Silver peso	.47,4	.46,5	.44,3	.41,2	.41,4	.40,9	.41,8
China	Amoy tael	.76,7	.75,7	.71,7	.66,4	.68,5	.66,2	.67,6
	Canton tael	.76,5	.75,5	.71,5	.66,4	.68,3	.66	.67,4
	Chefoo tael	.73,3	.72,4	.68,6	.63,7	.65,5	.63,3	.64,6
	Chinkiang tael	.74,9	.73,9	.70	.65,1	.66,9	.64,6	.66
	Fuchau tael	.70,9	.70	.66,3	.61,6	.63,4	.61,2	.62,5
	Haikwan tael	.78	.77	.73,1	.67,8	.69,7	.67,3	.68,8
	Hankow tael	.71,7	.70,8	.67,1	.62,3	.64,1	.61,9	.63,2
	Ningpo tael	.73,7	.72,8	.68,9	.64	.64,3	.63,6	.65
	Niuchwang tael	.71,9	.71	.67,2	.62,5	.65,9	.62	.63,4
	Shanghai tael	.70	.69,1	.65,5	.60,8	.62,6	.60,4	.61,7
	Swatow tael	.70,8	.69,9	.66,2	.61,5	.63,3	.61,1	.62,4
	Takao tael	.77,2	.76,2	.72,2	.67	.66	.66,6	.68
	Tientsin tael	.74,3	.73,4	.69,5	.64,6	.66,4	.64,1	.65,5
Colombia	Silver peso	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9	.41,8
Ecuador	do.	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9	.41,8
India *	Silver rupee	.22,5	.22,2	.21,1	.19,6	.20,1	.19,1	.19,9
Japan	Silver yen	.51,1	.50,5					
Mexico	Silver dollar	.51,5	.50,8	.48,2	.44,6	.46	.44,4	.45,4
Persia	Silver kran	.08,7	.08,6	.08,2	.07,6	.07,8	.07,5	.07,7
Peru	Silver sol	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9	.41,8
Russia	Silver ruble	.37,9	.37,4					

* The value of the rupee to be determined by consular certificate.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalents.
Almude	Portugal	4.422 gallons.
Ardeb	Egypt	7.6907 bushels.
Are	Metric	0.02471 acre.
Arobe	Paraguay	25 pounds.
Arratel or libra	Portugal	1.011 pounds.
Arroba (dry)	Argentine Republic	25.3175 pounds.
Do	Brazil	32.38 pounds.
Do	Cuba	25.3664 pounds.
Do	Portugal	32.38 pounds.
Do	Spain	25.36 pounds.
Do	Venezuela	25.4024 pounds.
Arroba (liquid)	Cuba, Spain, and Venezuela	4.263 gallons.
Arshine	Russia	28 inches.
Arshine (square)	do	5.44 square feet.
Artel	Morocco	1.12 pounds.
Baril	Argentine Republic and Mexico	20.0787 gallons.
Barrel	Malta (customs)	11.4 gallons.
Do	Spain (raisins)	100 pounds.
Berkovets	Russia	361.12 pounds.
Bongkal	India	832 grains.
Bouw	Sumatra	7,096.5 square meters.
Bu	Japan	0.1 inch.
Butt (wine)	Spain	140 gallons.
Caffiso	Malta	5.4 gallons.
Candy	India (Bombay)	529 pounds.
Do	India (Madras)	500 pounds.
Cantar	Morocco	113 pounds.
Do	Syria (Damascus)	575 pounds.
Do	Turkey	124.7036 pounds.
Cantaro (cantar)	Malta	175 pounds.
Carga	Mexico and Salvador	300 pounds.
Catty	China	1.333⅓ (1⅓) pounds.
Do	Japan	1.31 pounds.
Do	Java, Siam, and Malacca	1.35 pounds.
Do	Sumatra	2.12 pounds.
Centaro	Central America	4.2631 gallons.
Centner	Bremen and Brunswick	117.5 pounds.
Do	Darmstadt	110.24 pounds.
Do	Denmark and Norway	110.11 pounds.
Do	Nuremberg	112.43 pounds.
Do	Prussia	113.44 pounds.
Do	Sweden	93.7 pounds.
Do	Vienna	123.5 pounds.
Do	Zollverein	110.24 pounds.
Do	Double or metric	220.46 pounds.
Chih	China	14 inches.
Coyan	Sarawak	3,098 pounds.
Do	Siam (Koyan)	2,667 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Cuadra	Argentine Republic	4.2 acres.
Do	Paraguay	78.9 yards.
Do	Paraguay (square)	8.077 square feet.
Do	Uruguay	Nearly 2 acres.
Cubic meter	Metric	35.3 cubic feet.
Cwt. (hundredweight)	British	112 pounds.
Dessiatine	Russia	2.6997 acres.
Do	Spain	1.599 bushels.
Drachme	Greece	Half ounce.
Dun	Japan	1 inch.
Egyptian weights and measures	(*See* CONSULAR REPORTS No. 144.)	
Fanega (dry)	Central America	1.5745 bushels.
Do	Chile	2.575 bushels.
Do	Cuba	1.599 bushels.
Do	Mexico	1.54728 bushels.
Do	Morocco	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do	Uruguay (double)	7.776 bushels.
Do	Uruguay (single)	3.888 bushels.
Do	Venezuela	1.599 bushels.
Fanega (liquid)	Spain	16 gallons.
Feddan	Egypt	1.03 acres.
Frail (raisins)	Spain	50 pounds.
Frasco	Argentine Republic	2.5096 quarts.
Do	Mexico	2.5 quarts.
Fuder	Luxemburg	264.17 gallons.
Garnice	Russian Poland	0.88 gallon.
Gram	Metric	15.432 grains.
Hectare	do	2.471 acres.
Hectoliter:		
Dry	do	2.838 bushels.
Liquid	do	26.417 gallons.
Joch	Austria-Hungary	1.422 acres.
Ken	Japan	4 yards.
Kilogram (kilo)	Metric	2.2046 pounds.
Kilometer	do	0.621376 mile.
Klafter	Russia	216 cubic feet.
Kota	Japan	5.13 bushels.
Korree	Russia	3.5 bushels.
Last	Belgium and Holland	85.134 bushels.
Do	England (dry malt)	82.52 bushels.
Do	Germany	2 metric tons (4,480 pounds).
Do	Prussia	112.29 bushels.
Do	Russian Poland	11⅓ bushels.
Do	Spain (salt)	4,760 pounds.
League (land)	Paraguay	4,633 acres.
Li	China	2,115 feet.
Libra (pound)	Castilian	7,100 grains (troy).
Do	Argentine Republic	1.0127 pounds.
Do	Central America	1.043 pounds.
Do	Chile	1.014 pounds.
Do	Cuba	1.0161 pounds.
Do	Mexico	1.01465 pounds.
Do	Peru	1.0143 pounds.
Do	Portugal	1.011 pounds.
Do	Uruguay	1.0143 pounds.
Do	Venezuela	1.0161 pounds.
Liter	Metric	1.0567 quarts.
Livre (pound)	Greece	1.1 pounds.
Do	Guiana	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Load	England (timber)	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 superficial feet.
Manzana	Costa Rica	1⅞ acres.
Do	Nicaragua and Salvador	1.727 acres.
Marc	Bolivia	0.507 pound.
Maund	India	82⅔ pounds.
Meter	Metric	39.37 inches.
Mil	Denmark	4.68 miles.
Do	Denmark (geographical)	4.61 miles.
Milla	Nicaragua and Honduras	1.1493 miles.
Morgen	Prussia	0.63 acre.
Oke	Egypt	2.7225 pounds.
Do	Greece	2.84 pounds.
Do	Hungary	3.0817 pounds.
Do	Turkey	2.85418 pounds.
Do	Hungary and Wallachia	2.5 pints.
Pic	Egypt	21¼ inches.
Picul	Borneo and Celebes	135.64 pounds.
Do	China, Japan, and Sumatra	133⅓ pounds.
Do	Java	135.1 pounds.
Do	Philippine Islands (hemp)	139.45 pounds.
Do	Philippine Islands (sugar)	140 pounds.
Pie	Argentine Republic	0.9478 foot.
Do	Castile	0.91407 foot.
Pik	Turkey	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound)	Denmark and Sweden	1.102 pounds.
Quarter	Great Britain	8.252 bushels.
Do	London (coal)	36 bushels.
Quintal	Argentine Republic	101.42 pounds.
Do	Brazil	130.06 pounds.
Do	Castile, Chile, Mexico, and Peru	101.61 pounds.
Do	Greece	123.2 pounds.
Do	Newfoundland (fish)	112 pounds.
Do	Paraguay	100 pounds.
Do	Syria	125 pounds.
Do	Metric	220.46 pounds.
Rottle	Palestine	6 pounds.
Do	Syria	5¾ pounds.
Sagen	Russia	7 feet.
Salm	Malta	490 pounds.
Se	Japan	3.6 feet.
Seer	India	1 pound 13 ounces.
Shaku	Japan	10 inches.
Sho	do	1.6 quarts.
Standard (St. Petersburg)	Lumber measure	165 cubic feet.
Stone	British	14 pounds.
Suerte	Uruguay	2,700 cuadras (see cuadra).
Tael	Cochin China	590.75 grains (trov).
Tan	Japan	0.25 acre.
To	do	2 pecks.
Ton	Space measure	40 cubic feet.
Tonde (cereals)	Denmark	3.94783 bushels.
Tondeland	do	1.36 acres.
Tsubo	Japan	6 feet square.
Tsun	China	1.41 inches.
Tunna	Sweden	4.5 bushels.
Tunnland	do	1.22 acres.
Vara	Argentine Republic	34.1208 inches.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Vara	Castile	0.914117 yard.
Do	Central America	32.87 inches.
Do	Chile and Peru	33.367 inches.
Do	Cuba	33.384 inches.
Do	Curaçao	33.375 inches.
Do	Mexico	33 inches.
Do	Paraguay	34 inches.
Do	Venezuela	33.384 inches.
Vedro	Russia	2.707 gallons.
Vergees	Isle of Jersey	71.1 square rods.
Verst	Russia	0.663 mile.
Vlocka	Russian Poland	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram ($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6418 gallons.
Hectoliter (100 liters) equals 26.418 gallons.
Kiloliter (1,000 liters) equals 264.18 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.

Decameter (10 meters) equals 393.7 inches.
Hectometer (100 meters) equals 328 feet 1 inch.
Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).
Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.
Are (100 square meters) equals 119.6 square yards.
Hectare (10,000 square meters) equals 2.471 acres.

CONSULAR REPORTS.

COMMERCE, MANUFACTURES, ETC.

Vol. LVIII. OCTOBER, 1898. No. 217.

TRADE CONDITIONS OF EGYPT.

The following report on trade conditions in Egypt, with suggestions a to the export trade from the United States, was received in the Bureau of Foreign Commerce, August 27, 1898:

Egypt, owing to its natural resources and to its situation with reference to the Suez Canal, the main highway of commerce between Europe and Asia, is a market well worthy of the attention of the American manufacturers and business men. With an area of 394,240 square miles, it is almost equal in extent to the whole of the North Atlantic and South Atlantic States. The cultivated and settled parts aggregate 12,976 square miles, being about equal in area to the State of Maryland.

Nineteen hundred years ago, the population of Egypt was 8,000,000; under the rule of the Mamelukes (1517), it was reduced to 3,000,000. In 1875, the population was 6,000,000; and under the rule of Tewfik and his son, Abbas II, since 1882, its population has steadily increased, so that at present it is between nine and ten millions. The capital of Egypt is Cairo, with a population of about 400,000. The commercial center is Alexandria, with 250,000 inhabitants. Port Said and Ismaila have become important towns since the opening of the Suez Canal.

The dominant religion is Mohammedan, although about one-tenth, or more, of the population are Copts, who profess the Christian faith.

The language of the people is Arabic, while that of commerce is

increasingly English. In Cairo, French and Italian are also largely used in commercial transactions.

The Khedive, under a partial suzerainty of Turkey, is the sovereign of Egypt; but practically, at present and since 1882, Egypt is and has been entirely under British influence. Ismail Pasha, during whose rule the Suez Canal was built, borrowed large sums of money at exhorbitant rates. When the interest came due, he was unable to pay. The European governments interfered on behalf of their subjects who were bondholders, deposed Ismail Pasha, and took charge of the finances, placing England and France in control. In 1882, in the reign of Tewfik Pasha, son of Ismail, there was a rebellion against foreign rule, headed by Arabi Pasha. This was suppressed by the British, and Arabi Pasha, after his defeat at Tel el Kebir, was banished to Ceylon. Great Britain then took the entire management of Egyptian affairs into her own hands.

The people of Egypt, the bondholders, and the world at large, so far as their commercial interests are concerned, have largely profited since the banishment of Arabi. The land tax, which was formerly $24 a feddah (about an acre), is now $7.50, in this way benefiting the masses of the people. The bonds are selling at 106 and over and are perfectly secure. Justice prevails in the administration of the laws, and fellaheen and nobles, natives and foreigners, can all secure their rights in a legal way. This has been notably demonstrated by the condemnation and sentence of an Egyptian prince to seven years' imprisonment for an attempted murder.

The fertility of Egypt is entirely dependent on the Nile and its yearly inundations. As a rule, the river commences to rise in June and reaches its maximum in September; but this is not always the case, and the time and duration of the inundations vary considerably. A regular irrigation of the country is therefore necessary.

In modern times, Mehemet Ali (in 1842) commenced the construction of a large Nile dam—the Barrage—which was, however, after a short period of time, so much damaged that it was practically useless from 1867 to 1883; but since the country has been under British influence, the great Nile dam has been repaired and the canal system regulated and completed. The importance of these irrigation works is best shown by the enormous influence they have had on the fertility of the country. The average value of the crop has increased, since 1883, $4,000,000 per annum; thus it can be seen that, financially, Egypt has been greatly benefited by the irrigation improvements of the last ten years. At present, the cultivated and revenue-paying area is about 5,000,000 acres. This will be considerably increased by the new dam that is about to be constructed at Assouan, the contract for which has already been placed;

and if no political difficulties arise, Egypt will reap the full benefit of its fertile soil.

Beyond its interest to tourists, arising from its wonderful ruins and its antiquities, Egypt has not attracted much attention from Americans. The doings of the Hebrew prime minister, Joseph, in the days of the Pharaohs, are known in every household. The history of Egypt is familiar to every schoolboy who ever studied ancient history. Yet the names of Mehemet Ali and Arabi Pasha and the wonderful progress that Egypt is making under the present enlightened Khedive, Abbas II, seconded by the British, are almost unknown to the average American. The commercial importance of Egypt and the opportunities for trade have never been properly appreciated by business men in the United States.

In no way is the industrial progress of Egypt better illustrated than by the present development of its railway system. In proportion to the population, Egypt has more railway mileage than Austria-Hungary, Spain, or Portugal. All railways are Government property, with the exception of a short railway in the neighborhood of Alexandria (15 miles in length) and another joining Port Said and Ismaila on the Suez Canal. These railroads, private as well as Government, are very profitable. The income from the Government lines is pledged to certain European bondholders as a consequence of the extravagance of Ismail Pasha. Egypt has at present 1,400 miles of railway, the most important lines being those connecting Alexandria and Cairo; Cairo, Ismail, and Suez; and the Nile Valley Railroad, on the left bank of the Nile The present cost of construction, where bridges over irrigation canals are numerous, is about $29,000 per mile of normal gauge. In upper Egypt, it is not more than $26,000, while narrow-gauge extensions (1 meter=39.37 inches) cost only $13,000. The railways are managed by an administration board of three, the chairman of which is an Englishman; the others are, respectively, French and Egyptian. The receipts of the railroads increased from $7,000,000 in 1890 to $9,000,000 in 1894.

The imports of Egypt in 1875 amounted to about $25,000,000; in 1896, they amounted to $50,900,000, being an increase of 100 per cent in twenty-one years.

These imports came from the following countries:

Country.	Value.	Country.	Value.
England and possessions	$18,508,700	Russia	$1,852,000
Turkey	9,958,000	Italy	1,659,000
France and possessions	6,060,000	Germany	1,408,000
Austria-Hungary	3,512,000	Greece	405,000
Belgium	2,296,000	United States	215,540

River navigation on the Nile and in the Delta is considerable. Since 1883, many agricultural roads have been built, more are contemplated, and the use of wheeled transport is becoming common. Roads, in the true sense of the word, did not exist until 1891, since when and up to the end of 1897 about 1,750 kilometers (1,087 miles) have been constructed throughout Middle and Lower Egypt. When it is remembered that the area of these two divisions of Egypt is about 4,500,000 acres, the number of roads is still very small. Wheeled vehicles for the transport of produce are as yet very little employed, nor is it reasonable to expect much development in this direction until roads are far more numerous. It is to be hoped carting contractors will appear in course of time to replace the camel contractors.

A very important step toward improving the means of inland transport has been effected by the Government during the year under report, by granting concessions to companies for the construction of light railways in the following provinces:

	Kilometers.
Galioobeeyeh, Sharkeeyeh, and Dakahleeyeh	*200
Foyoom	Unknown.
Behera	*200
Gharbeeyeh	Not fixed.

For the most part, these lines are to be laid on the newly made roads; but nothing prevents lines being made elsewhere if the companies find it to their advantage to do so. With these light railways and properly constructed roads putting them into communication with every village, the cost of transport ought to be very largely reduced and the time occupied en route much less than at present.

The exports from the United States to Egypt in 1896 consisted of the following items:

Agricultural implements	$17,174
Iron, steel machinery	13,481
Oil	99,498
Perfumery	134
Spirits, distilled	6,028
Woods, and manufactures of	29,117
All other articles	50,198
Total	215,540

While it may be that large quantities of American goods go into Egypt via Germany and England, still there is no doubt that this market is very much neglected. It is to be hoped that in the general movement to improve our shipping connections the possibilities of Egyptian trade will not be overlooked. It is true that the heavier

*124 miles.

freight rates from New York are against us; but if a Hamburg merchant can come to the United States and buy from an American paper mill a large quantity of paper for printing purposes, send it to Hamburg, and then reship it elsewhere, it is evident that it is possible to place American goods in foreign markets, in spite of lack of direct communication.

Our imports from Egypt in 1896 amounted to $4,632,000, consisting almost entirely of cotton. In the first eleven months of 1897, cotton imports from Egypt amounted to $4,277,618; sugar imports from Egypt amounted to $3,034,273. This trade is carried on by British vessels; and if Americans would send in return such manufactured goods as are in demand here, good cargoes could be made up. Cotton raising is becoming more general every year in Egypt. The importance of this line of agriculture may be seen by an examination of the exports. In 1875, they exported 339,222 bales of cotton; in 1896, 680,960 bales. Of this latter, England received 337,078 bales; Russia, 89,565 bales; France, 76,247 bales; Austria, 71,436 bales; United States, 59,339 bales; and other countries in smaller amounts. This shows that they have doubled their exports of cotton in twenty-one years.

It was only ten years ago that Egyptian cotton was introduced into the United States. The trade has increased with marvelous rapidity; in 1890, 18,900 bales, and in 1896, 59,339 bales were imported. The larger part of the cotton sent from Egypt is consigned to Boston commission agents and sold to New England mills. The development of the cotton industry in Egypt dates from the time of the civil war in America. England is anxious to have its growth encouraged, in order to have another market from which to draw supplies for Lancashire mills. This development has not been without its influence on other agricultural products; this can be seen in the increased importation of flour. From 1881 to 1892, the annual imports amounted to 25,000 barrels; in 1894, 107,000 barrels; 1895, 191,000 barrels; 1896, 350,000 barrels. In 1896, 80 per cent came from Marseilles, France; the rest from Odessa, Trieste, etc.

The total exports of Egypt in 1896 amounted to $68,000,000, consisting of cotton, cotton seed, cane sugar, beans, wheat, onions, skins, and natural wools. England takes about 35 per cent of the exports.

The Egyptian imports are increasing from year to year, having now reached the sum of $50,000,000, of which the United States furnishes the insignificant sum of $215,000, or less than one-half of one per cent.

The United States produces a great many articles which, if placed in the Egyptian market, would find a ready sale. In order to convey

some idea of the character and extent of the market, I give some of the principal items imported in 1896:

Articles.	Value.	Articles.	Value.
Petroleum	$845,200	Soap	$450,000
Writing paper	172,000	Cotton yarns	810,000
Wrapping paper	228,000	Cotton fabrics	7,500,000
Lumber for building	2,192,000	Iron hardware	2,355,000
Furniture	230,000	Copper brass goods	565,000
Coal	2,125,000	Machinery and parts of	2,164,000
Charcoal	420,000		

The past few years have been marked by unusual activity in engineering works in Egypt. New sugar factories have been erected, many bridges built, light railroads for agricultural purposes constructed, and there is no doubt that the coming year will show a great increase in the amount of Egyptian imports.

Although the United States sold fifteen locomotives to Egyptian railways in 1898, they come mostly from Belgium; first-class passenger cars from England; rails from England and Germany; bridge work from Belgian, French, and German firms. The increase of the imports in iron and machinery in 1896 was the result of the development of the sugar industry and the introduction of electrical tramways in Cairo and Alexandria.

The portable-engine trade, as well as that of steam pumps, is extensive, and would be greater if there were less difficulty in obtaining permission for pumping purposes from the Government.

Fixed engines and corn-grinding mills, from 12 to 25 horsepower, are being sold all the year around, and lately compound engines have been in demand, as the present class of engineers have more experience and are better able to work these engines than a few years ago.

Boiler explosions happen from time to time and serious loss of life occurs; that there is not more is extraordinary. In this line of business, there is likely to be an increase of trade to replace the old plants that are working at great risk of explosion. The Government takes certain precautions, but they are quite inadequate to what is necessary, as the reckless management of the safety valves and proverbial carelessness of the native firemen ("osta") leave many probabilities of accidents.

The use of thrashing machines is making strides in the country; and, besides two Government land departments, a few other large landed proprietors are working them.

Of pumps for irrigating purposes and mills for corn grinding, England is the leading exporter to this country.

A few Belgian, French, and Italian motor pavers have been lately introduced.

Since the making of agricultural roads, light railways have been a new feature in Egypt, and some good orders have been given to both Belgium and England.

The tramways at present in use are of Belgian and French manufacture.

In engineering tools, England gets a large share, although from time to time American makes are placed on this market and cut out English trade.

Files for Egyptian Government railway administration have been a sore point to the English manufacturers for some three years; they have been furnished by Belgian and Italian firms at lower prices than the English files.

The trade of iron, steel, tin, etc., is entirely in the hands of Syrians and Arabs, who keep stocks of bars, plates, angles, etc., which are bought direct from Belgium and England or through the German commission houses.

Almost the whole of the cotton piece-goods trade is in the hands of German and French firms. These firms, resident in Manchester, have branch houses in Egypt or are represented by German agents. Their travelers, principally German, are sent out every year and remain for from three to five months in the country. There is at present a strong and increasing competition from Germany in the lower qualities of cotton prints. In woolen goods, there is a growing competition from France, Italy, and Germany, although at present England predominates.

The importation of coal during 1896 at Alexandria amounted to over 631,000 tons. Calculating the local consumption and that of the immediate neighborhood (but not including supplies to steamers) at 35,000 tons, it may be estimated that over 520,000 tons leave Alexandria for the interior by rail and by the Nile via Rosetta and via Mahmoudieh Canal. Port Said, with its big importation of nearly 1,100,000 tons and its cheaper means of communication (by boat through Lake Menzalch to Damietta and thence by the River Nile) with Cairo, successfully opposes Alexandria merchants in the trade of Cairo and the stations on the Damietta branch of the Nile. The annual importation of coal into Alexandria and Port Said is steadily increasing.

The demand for paper boards is growing from year to year. In former years, Austria was the chief importer of this class of goods. During the past few years, Germany has been gaining in the trade in this and other lines of paper.

It may be said that the year 1896 can not be considered as having

been a favorable year for foreign trade. The increase of importation of iron and steel manufactures will continue for many years to come. Many new works are likely to be constructed, and there will be an increase of agricultural railroads. New gas and water works in the provinces and the construction of water reservoirs and railways, will continue to increase for many years.

COMMERCIAL CUSTOMS.

Egypt may be regarded by the majority of American merchants and manufacturers as a market of little or no importance; but I may well draw their attention to the statistics and items of imports to prove it a market deserving of their close attention. I can assure them that with the opening up of the Dongola province the importation of textiles and other goods will increase rapidly. There is plenty of scope for American firms to extend their operations to Egypt, provided they are prepared to do so in an enterprising spirit.

In entering any foreign market, there are certain conditions essential to success, among which a knowledge of the customs governing the trade in that country is the most important.

Where it is possible, instead of depending upon agents and commission merchants, the exporter should have the field examined and the preliminary relations established by a competent salesman in whose judgment he can trust—one who understands the language of the country, or at least the commercial language, where, as in Egypt, it is different from the native language. This is the way England and Germany have gained such a foothold in foreign markets; but I believe the plan I will outline further on can be fairly shown to be sufficiently promising to deserve a trial.

The exports should conform to the trade conditions found in the country. This is especially applicable to the land of the Nile, as in it—in common with most of the Oriental countries—there are always a number of commercial houses which are built upon a capital of false pretenses, with the intention of defrauding foreign merchants. It is necessary, therefore, that our manufacturers and export merchants should exercise caution, tempered with good judgment, in their dealings. There are in Alexandria, Cairo, Port Said, Suez, and other cities of Egypt a large number of houses of high standing which are deserving of credit. These houses are honorable and reliable in their dealings, and it is perfectly safe to do business with them. Two of these, of undoubted standing, I have been able to interest in my plan as proposed.

As a rule, trade customs in Egypt are different from those in the United States. No manufacturer selling directly must expect to get cash payments. He can not draw at once on shipment, as his draft

would be likely to be presented before the goods arrive. There are a few firms in Egypt who pay in this way; but they are exceptional, and this can only be effected, if at all, by liberal concessions in the way of discounts or by adopting the method as proposed by me. Credit is asked and expected for from three to nine months and often, by perfectly reliable houses, for longer terms. A number of good banks are found here, some of them branches of leading European firms, and they give all needed facilities in the matter of discounting mercantile paper.

In dealing directly, it is wise to make clear contracts, including terms of delivery and modes of payments. If the firm is not well known, banking references should be asked for. This office and its consular agents are willing, and generally able, to give any information necessary to protect the general trade from any swindlers who may be endeavoring to prey upon the trade of their countrymen.

To those Americans who prefer direct relations with Egypt, I would say there are among the commission merchants many reputable firms that are worthy of confidence; but the choice of agents to represent manufacturers can not be too carefully made. Under the English system of resident agents or salesmen, by knowing the trade and being in touch with the purchasers, a number of firms may be represented by one house. German firms are generally represented in Cairo and Alexandria by a permanent agent; but, in addition to this, they send out once or twice a year a salesman who, together with the resident agent, visits the customers. This is, of course, a more expensive way; it has been, however, in the past the best method to secure complete information as to the real state of the market.

MEANS OF COMMUNICATION WITH UNITED STATES.

Until a short time ago, there was no regular communication between the United States and Egyptian ports, but the New American Indian Line (Norton & Sons, 115 Produce Exchange, New York), passes through the Suez Canal and will of necessity stop at Port Said and Suez. From the latter city there is direct railway connection with Cairo and Alexandria. They would naturally be glad to encourage any trade with Egypt, as it lies on their route. Goods can also be sent by the International Navigation Company via Liverpool, via Marseilles, or North German Lloyd Company, via Genoa. Barber & Co., New York, also occasionally have vessels going direct to Alexandria.

With the large cargoes of cotton and sugar going from Egypt to the United States, amounting to $7,000,000 in value, it would seem, with proper encouragement, that an equally large direct return

trade to Egypt could be built up, instead of the paltry $215,000 return, of which nearly one-half is petroleum.

OPENINGS FOR AMERICAN GOODS.

Through the medium of the Department, I wrote on December 15, 1897, to Dr. W. P. Wilson, managing director of the Philadelphia Commercial Museums, naming some of the lines which would find an opening here.*

Since then, I have devoted much time and study to the possibilities of the Egyptian market for the introduction and sale of American products. To give a more complete list of such goods as, if their quality, forms, and prices were seen and known, should find buyers in this country in preference to the manufactures from England, France, and Germany, I would mention the following:

Articles of carpentering, such as door frames, wood frames, sash, and venetian blinds.
Wooden ware.
Tools.
Hinges.
Bolts.
Wire nails.
Wood screws.
Door and window furnishings.
Wood moldings for picture frames and other purposes—plain, gilt, and colored.
Agricultural implements and tools, such as shovels, plows, hoes, cornshellers, etc.
Mining, milling, and hydraulic machinery.
Sewing machines.
Typewriters.
Wagons.
Carriages.
Wheelbarrows, wood and iron.
American novelties.
Boots and shoes.
Coal-oil lamps.
Gas meters.
Gas and electric light fixtures of good designs and low cost.
Stoves and ranges that burn soft coal, petroleum, or gas.
Dental appliances.
Fire extinguishers, such as the Stempel.
Furniture.
Patent medicines.
Photographic apparatus, including kodaks.
Printing presses and type.
Expanded and corrugated metals.
Steam and hot water heating apparatus.
Rubber hose and rubber goods.
Watches and clocks.
American cigarettes.
Chewing gum.
Confectionery.
Canned goods and fancy groceries.
Cereals, such as Quaker Oats, wheaten and corn grits.
Baked beans.
American meats, canned and cured.
Flour.
Soap.

The only field for the employment of agricultural machinery is on large estates and in the extensive, thinly populated wastes of the northern Delta. Even in these latter localities the use of machinery is very much restricted, owing to the slow advance made in reclaiming salt lands. The population of Egypt has increased during the

*See Review of the World's Commerce, 1896 97, p. 78.

past fourteen years in a far larger proportion than has the cultivated area; consequently, it is generally possible to find laborers for newly reclaimed land. Any scheme for largely increasing the steam water supply, such as the large reservoir projected in upper Egypt, would result in reclamation advancing faster than it would be possible to find labor; and machinery would be necessary, at any rate, for the first few years. Small machines have a better chance; but the Egyptian cultivator likes the systems employed by the ancients, and it will take years to induce him to substitute new methods. For instance, the old hay cutter, known as the "norag," is the slowest of slow machines; but the fellah much prefers it to the foreign-made machines, which do the same work in half the time and with far less labor. It is the same with winnowing and all other farming operations. The fellah prefers the ancient plow. It is cheap and does what is required; it scratches the surface. Until a cheaper and lighter plow has been designed, the old one will certainly not be abandoned. I was told by one large owner who had provided plows for his tenants that one objection which was made to their use was that they "chilled the ground," so that not only is ignorance to be overcome, but prejudice as well.

One class of machinery the fellah appreciates is the steam pump; so long as water has to be lifted or there is water to lift, steam pumps will be employed. No improvements in labor the fellah can produce, whether human or animal, could ever do the work of steam pumps. The fellaheen will combine and purchase a steam pump, whereas they will not combine and buy a thrashing or winnowing machine. There is labor to thrash and to winnow, whereas there is not sufficient labor to lift all the water required. The very fact of using steam water lifts releases a certain amount of both human and animal labor for use in other farming operations. It is doubtful whether the area of thickly populated lands will ever be greater than the rural population can farm with the present methods. Permission is given in almost all instances to erect large pumping stations on the Nile; but there is no saying when the Government will cease to give more of such permits. When the Egyptian service believes that the summer supply of the Nile is doing its maximum duty, no new pumps will be permitted. The substitution of steam pumps for sakiehs, or Persian wheels, however, will probably continue for many years. Anything done to increase the summer supply of the Nile will be immediately followed by an increased demand for steam pumps.

CIRCULARS AND TRADE LISTS.

When destined for other than English houses, they should be either in French or Italian, and weights and measures of the metric

system employed. The Egyptian piaster, however, is very close in value (4.94 cents) to the United States half dime; and it may be that price lists in our currency will be soon understood. Quotations thus made in the money of the country would necessarily imply that any loss of the exchange in getting the funds home would be for account of the American vendor; and in cases where the latter would be unwilling to accept this as one of the possible charges of the business, a note to that effect should be inserted in the price lists. Five years ago, the Egyptian customs administration officially adopted the metric system, the weights and measures of which are now in general use here and are much more intelligible to the majority of traders in Egypt than those employed by Great Britain.

CREDITS.

Not a few of the responsible retail dealers in Egypt, both British and foreign, complain of the rigor of the terms of the American and English exporters, as compared with the continental sellers, the latter, especially the Germans, being much more liberal in their credits, and altogether making such obvious efforts to meet the desires of their buyers as to secure the sympathies of almost all classes in business. It seems clear that some relaxation of the present American terms, at least, might be judiciously made, should traders of whatever nationality merit it, and it ought to be the aim of the representative of the United States, either resident agent or traveler, to qualify himself to advise his principals on this point. While saying this, it is necessary to sound a note of warning to those doing business directly, against the great danger of according credits to traders without prior inquiry as to their standing.

COMMERCIAL TRAVELERS.

Although commercial travelers of the English-speaking countries are more to be seen in Egypt than formerly, they are still inferior, in point of number, to their European competitors. Their forces, should it be intended to do business by this means, undoubtedly require to be increased. Although English is largely understood, the French and Italian languages are those most commonly known among middlemen here, with whom the traveler would have to deal; and of those languages, or at least of one of them, he ought to possess a colloquial knowledge. The visits to Egypt of these agents of direct sellers should be made with such frequency and at such seasons as may be found expedient in their respective lines of business, and could not fail to have an influence infinitely superior to the most lavish distribution of trade circulars.

RESIDENT AGENTS.

In the able report upon the commercial relations of Great Britain and Egypt, made in 1896 by Mr. Rennell Rodd, first secretary of Her Majesty's agent at Cairo, the writer refers to the extent to which British trade in this country is conducted through foreign agents, as being a possible reason for a considerable falling off in the amount of British imports. It is by no means rare to find foreign agents representing a number of firms, not only British, but European houses, that supply a similar description of goods; and it is said that the falling off of the amount of British imports is possibly due to the prejudice of the commercial methods of such agents, as it is unlikely, under the circumstances, that the same justice can be done to the British constituents, as would be the case if the interests of the latter were confided to an agent of their own nationality. If it be true, as affirmed, that the British exporter is sometimes induced to accept the services of foreign resident agents, because they charge him a lower rate of selling commission than would be asked by a British agent, the American exporter would do well to reflect as to the manifest drawbacks attached to intrusting his interests to firms, however honorable, who represent at the same time his most active, enterprising, and intelligent British and continental rivals, with whom are, as a matter of course, all their national and personal sympathies.

SALE TERMS.

Complaints are not infrequently heard of the method of quoting prices for goods delivered at the place of manufacture, thus leaving to the buyer the obligation of ascertaining all the intermediate expenses up to the moment when the articles reach his hand. As a rule, French houses quote prices delivered at Marseilles, Bordeaux, Havre, or Antwerp; and German, Belgian, or Austrian firms at Hamburg, Antwerp, or Trieste. The American exporter could greatly improve upon the foregoing by quoting costs, insurance, and freight at Alexandria; and if unable to do this, then certainly he should give his figures free on board at well-known United States ports, such as New York, Philadelphia, Boston, and Baltimore, whenever this may be possible, and state, as far as he can, the prevailing rate of freight per ton or 40 cubic feet to Egypt.

TRADE-MARKS.

An important decision has been given by the mixed court of first instance at Alexandria, that only articles actually manufactured in a town were legally entitled to be marked with the name of the town. This judgment was subsequently fully confirmed by the court of appeal, the defendants being ordered to efface, at their own ex-

pense, the word "Sheffield" on razors thus falsely marked; and further importation or sale of similar goods was prohibited under penalty of £2 per dozen. Favorable judgments have likewise been obtained in reference to a polish bearing the name of "Meltonian Cream," the defendants in the latter case being fined £50, forbidden to import or put on sale any more of the goods, under penalty of 2s. 6d. per bottle, and ordered to pay for the insertion of the judgment of the court in three local journals. The court appears to have taken a broad view of the word "imitation;" for wherever the counterfeit trade-mark resembles the genuine one sufficently to deceive an ordinary and casual observer, the importers or dealers have been held responsible. The simple introduction into Egypt of counterfeit marks forms a sufficient cause of action, without proof of effected or attempted sale; and on several occasions the court has responded to the demand for the seizure of imitation labels, capsules, etc., which it was assumed were intended to be attached to articles other than those properly entitled to bear them destined for sale in the country. Trade-marks can now be registered at the mixed courts, and, although perhaps not absolutely legally necessary, it is advantageous to do this, seeing that the surest ground for action against fraudulent imitators is thus prepared.

It is said that high-class, and therefore expensive, goods find but few purchasers in this market, and that which is wanted is a cheap article of as good quality as can be obtained for the money. Still, there is trade for goods of high class, and, as the country is increasing in wealth, buyers for the better grades increase; but business can only be satisfactorily diverted by consulting the tastes and buying capacity of the buyers; and in Egypt, without doubt, at the present time, cheapness is the principal desideratum.

AGENCY AND WAREHOUSE.

With the idea in mind of establishing an American agency, I have earnestly sought to find suitable and willing parties, familiar already with Egyptian trade and its requirements, who would agree to confine their business to American goods; and I believe I can say that I have been successful in two instances. The plan outlined is to raise, for the first year, the sum of at least $10,000, to be contributed by American exporters in sums of $250 and upwards, in proportion to the importance of their business and the space occupied in displaying their products in warehouses in both Cairo and Alexandria; $2,500 of this amount to be paid to the managers, one of whom would be in Cairo, the other in Alexandria; $2,500 estimated to be the rental of the two warehouses; $2,500 for the employment of clerks, salesmen, and for advertising purposes; and $2,500 to

come and go on for incidental expenses, advance money for duties, etc., and to be accounted for. Indeed, one of the houses, with ample capital, is perfectly willing to undertake the business if a generous commission be allowed; but I think the other plan, with a small commission—say 5 per cent—to cover guaranty, which would permit of immediate remittance for goods sold and delivered, would be better. The intent of the agent is to sell the goods to the Egyptian buyer at the American free-on-board price, plus the freight, with 10 per cent added to cover the duty and expense of putting into store. The duties are but 8 per cent, with some port charges, which, with the handling into warehouse, will about absorb the additional 2 per cent. It is not intended that the agent shall add a profit, but that the buyers shall realize the low prices at which the goods of American manufacture can be laid down and delivered to them. As it now is, such American goods as are sold in Egypt have a large profit—sometimes as much as 100 per cent—added to them; for instance, American office desks that have been sold to the Egyptian importer at about $20, free on board at New York, are retailed at from $45 to $50. It would largely increase the demand, if the low figures at which American goods really could be sold were generally known.

I am hopeful that when what I have mentioned becomes known to American manufacturers, thirty or forty will join in the plan and arrange either through the National Association of Manufacturers or through the Philadelphia Museums to perfect the matter. Both of these are greatly interested in the increase of our export trade and, I think, may willingly aid in giving the plan a fair trial. The initial cost will be small, and, should the plan unfortunately prove abortive, the loss will be at most of a trifling nature, while the probabilities of success, in my opinion, largely outweigh those of failure.

For much of the foregoing information I wish to express my acknowledgments to Dr. W. P. Wilson, managing director of the Philadelphia Commercial Museums; Mr. James Hewat, consular agent; and the chamber of commerce, Alexandria, Egypt.

THOMAS SKELTON HARRISON,
Agent and Consul-General at Cairo.

THE CARACAS WAREHOUSE.

Since the official inauguration by President Andrade of the American sample warehouse in Caracas, a full report of which appeared in ADVANCE SHEETS No. 90 (April 18, 1898), great strides have been made in the organization of the work of this institution. The large and spacious building is now well filled with a great variety of exhibits, representing the following industries:

Artificial limbs.
Bolts, nuts, etc.
Books.
Bookcases.
Brass goods.
Canned meats.
Cash registers.
Caskets.
Chemicals.
Confectionery.
Dry goods, comforts, and hangings.
Door checks.
Enameled ware.
Electrical house goods.
Electrical machinery.
Feed cutters, etc.
Felt hats.
Hardware specialties.
Hatters' furs and supplies.
Hook and eyes.
Horse blankets.
Lace curtains.
Lard, hams, and provisions.
Leather dressings.
Liqueurs.
Locks.
Locomotives.
Linoleum, oilcloth, etc.
Milling machinery.
Musical instruments,
Office furniture and fixtures.
Office stationery and supplies.
Office appliances.
Organs.
Piano materials.
Pianos.
Paper.
Photo cards.
Pipes.
Pulleys.
Pumping machinery.
Railway specialties.
Rubber-stamp goods.
Rugs.
Saws.
Seeds.
Silverware.
Sugar-cane mills.
Typewriters.
Watches.
Watch cases.
Water heaters.
Welsbach lights.
Wheelbarrows.
Wire rope.
Wood handles.
Wood ornaments.
Wooden ware.
Wood-working machinery.
Undertakers' supplies.
Underwear.

These exhibits are grouped in the various rooms according to trades, which makes a most attractive, and at the same time comprehensive, showing.

A description of the institution will give a better idea of its extent. The main hall, as one enters, is devoted to the reception room, general office, bureau of information, and directors' private office. It is a characteristic modern American office, fitted up in the most

approved style, and is a model of the application of all kinds of labor-saving office devices. The office furniture is the exhibit of the Globe Company, of Cincinnati, who indeed make a very handsome and complete showing. An exhibit of Remington typewriters in actual use facilitates the handling of the enormous correspondence of the institution. National autographic registers systematize the general work of the organization, while the use of Blaisdell paper pencils demonstrates the practical economy of the various American products in the line of stationery and office supplies, even down to the commonest article of everyday consumption. It is to be hoped that the efforts of the management to extend this idea to every detail, will meet with the hearty support of manufacturers in this line. This office can not fail to impress everyone who enters the building, and the actual demonstration of utility and labor-saving advantages afforded by our American office appliances should help greatly in introducing them into the market.

Adjoining the main office is a well-lighted room 18 by 24 feet, devoted to accommodating American traveling salesmen who are passing through Caracas and wish to display their samples under the most advantageous conditions. The entire lack of suitable sample rooms in any of the local hotels, and, above all, the splendid location of the exhibition building in the very heart of the business center, make the convenience of such a room so apparent that it hardly requires any further comment.

Passing to the left, one enters the main exhibition room, which is devoted principally to hardware, household and fancy goods. The exhibits of C. Disston & Sons, the Enterprise Manufacturing Company, Welsbach Light Company, and the National Casket Company attract especial attention in this department, through their neat and effective arrangement.

On the right of this main hall are two smaller apartments, which are reserved for the installation of a model American bathroom and toilet. It is to be hoped that a suitable exhibit of this kind will be made by some enterprising concern in this line at an early date, as this is certainly a splendid market for goods of this class.

Passing along, one enters at the right the food-product department, which is even now one of the most complete departments of the exhibition, although with the great variety of American products in this line there can hardly be a doubt that its capacity will have to be greatly enlarged before long. The exhibit of Libby, McNeil & Libby, Rheinstrom Bros., and J. H. Michener & Co., attract especial attention in this department.

Directly opposite, in a small room by itself, is located the very complete exhibit of the National Cash Register Company, whose

ingenious machines, heretofore entirely unknown in this country, justly arouse the wonder and interest of every visitor to the warehouse.

A spacious corridor, in which all kinds of goods that do not suffer from exposure to the air can be suitably shown, leads from this part of the building to the quarters devoted to the electrical and power plant. Here the Fort Wayne Electric Company has installed one of its electric-light plants, which it is expected to show in full operation in conjunction with various kinds of power plants, such as steam, gas, and petroleum engines. American manufacturers in this line should realize that here is afforded to them one of the most excellent and, at the same time, economical means for demonstrating the advantages of their respective power machinery. In this country, where the almost entire absence of railway or other means of communication besides mule paths, adds so enormously to the cost of fuel, and where in many instances the weight and bulk of the machines themselves prohibits their transportation altogether, the native wants to see in practical operation the machine which he is going to buy. He wants to know what it is going to cost him in the way of fuel such as he has available, and not merely such as we are accustomed to use in the United States, and he also wants to know that he can bring the article to his plantation after he has bought it. This warehouse affords such opportunity.

It is the intention of the management to utilize the large open space as a machinery hall, and this will afford a splendid chance for manufacturers of structural ironworks as well as of skylights and sheet metal and roofing material in general, to demonstrate the practical utility and cheap cost of American roofs, as against the expensive brick tiling which is universally used here.

In the rear of the building is a large unpaved open space, suited admirably for open-air exhibits, such as windmills, portable houses, miniature gas plants, etc.

Entering the central portion of the building, one comes to the music room, which, with its handsome exhibits made by Lyon & Healy, Strich & Zeidler, Shubert Piano Company, Estey Organ Company, as well as others, gives a very good idea of the important position which this branch of our industries occupies. It is to be hoped that one of the self-playing organ, as well as music box, manufacturers of the United States will add his exhibits at an early date, as both of these articles should find a ready sale here.

One next enters the dry goods and furnishing department, which has two large connected rooms devoted to it. At the present time, the representation of American manufacturers in this department is altogether inadequate to do justice to the importance of this branch

of our manufacturers. It is fortunate that among the concerns represented William Simpson's Sons & Co., Rudolf Blankenburg & Co., McCallum & McCallum, John Bromley & Co., the Glastonbury Knitting Company, and the John B. Stetson Company make very creditable showing; but, with the large market for dry goods and furnishing goods of all kinds which this country offers, there ought to be at least fifty times as many exhibits in this division. For instance, there are no American silks, drills, muslins, or cotton blankets represented at all. Cheap prints ought likewise to make a good showing; and, if our big New England mills have to close down for so many months per year, on account of overproduction, why not let them try to imitate the example of our English competitors and manufacture for this market what will be needed. True, it may cost a little effort and necessitate some expense at first, but careful study and persistent hard work will surely bring good results in course of time. So much has been written in various consular reports regarding the absolute need of our manufacturers accommodating themselves to the requirements of these markets that I do not want to repeat this old story; but I believe that they should promptly avail themselves of the facilities afforded by this warehouse to obtain the exact information and all data required by them, and then give proof, through the medium of a well-chosen exhibit, that they can supply the wants of this trade, and do it better than anyone else.

Facing the great central patio that is to be placed at the disposition of the Caracas Bourse, which is now being organized, is located the library, which forms one of the most unique and valuable features of the warehouse. I give below a list of the various journals, magazines, and trade papers which are now being regularly received. It is to be hoped that other publications, especially those relating to agriculture, will join in lending their active support. It will unquestionably redound to their direct benefit.

Lumber.
Sewing Machine Times.
Locomotive Engineering.
The Manufacturer and Builder.
The Textile Record.
American Carpet and Upholstery Journal.
The Manufacturer.
Fibre and Fabric.
Lumber Trade Journal.
Iron Trade Review.
Hardware.
Iron Age and Metal Worker.
The Power Publishing Company.
Shoe and Leather Reporter.
Paper Trade Journal.
Peck's Index.
Tobacco Leaf.
Profitable Advertising.
The Paper Mill.
Progressive Age.
The Furniture Worker.
Textile World.
Scientific American.
Tobacco.
Marine Review.
Exporters and Importers Journal.
Electrical Review.
The Engineer.
Southern States Farm Magazine

The Timber Trades Journal.
Hardware Dealers Magazine.
Ice and Refrigeration.
The Butchers Advocate.
American Druggist.
Mines and Minerals.
The Inland Printer.
Cloak and Furs.
The India Rubber World.
The National Builder.
The American Fertilizer.
Textile America.
The American Hatter.
Traffic.
Public Opinion.
The Commercial Bulletin.
Iron and Steel.
The Ironmonger.
Modern Machinery.
Home Market Bulletin.
Railroad Gazette.
Jewelers Weekly.
Grocery World.
Wool Market and Sheep.
Geyer's Stationer.
Modern Mexico.
Bonfert Wine and Spirit Circular.
Hide and Leather.
The Electrical World.
Railway Age.
Engineers Powers Users Magazine.
American Economist.
American Miller.
Modern Miller.
Dixie.
The Tradesman.
Grocers Journal of Commerce.
Business.
Bradstreets.
Clothiers, Haberdashers Weekly.
St. Louis Manufacturer.
The Foundry.
The Cassier's Magazine.
National Laundry Journal.
Lumber Trade Journal.
Electrical Engineer.
Varnish.
American Electrician.
The Dry Goods Chronicle.
Jewelers' Circular.
Engineering News.
Street Railway Journal.
Dun's Review.
American Engineer, Car Builder, and Railroad Journal.
The American Machinist.
Electricity.
The British Trade Review.
The Keystone.
The Roller Mill.
Spokesman.
The Art Interchange.
The Wheel.
The Harness World.
Architecture and Building.
Tin and Terne.
Brick, Farm Implements.
Illustrated Glass and Pottery World.
The Clothier and Furnisher.
The Lawyer and Credit Man.
The Cycle Age and Trade Review.
Pacific Coast.
Wood and Iron; Stove and Hardware Reporter.
The Blacksmith and Wheelwright.
The National Industrial Review.
Railway and Engineering Review.
Railway Master Mechanic.
The Implement Age.
The National Coopers' Journal.
American Cabinet Maker.

This library also contains a file of all the catalogues of the members of the National Association of Manufacturers, and it is proposed to make this collection the most complete record of American productions in existence. Nonmembers of the association have the right to send their catalogues, which are indexed and filed for the small charge of $5 per annum. No American manufacturer should fail to take advantage of this branch of the institution, even if he does nothing more. The library also contains full sets of Venezuelan Government reports of all the various departments, and it

would be very desirable to have our own Government represented by a full set of Agricultural Department records, as well as any other Government and State publications that relate to commerce and agriculture in any way. The library, like the office, is fitted up with the most modern appliances; and Wernecke sectional bookcases in actual use, exhibited by the Wernecke company, are attracting a great deal of attention.

Adjoining the library is a spacious apartment to be devoted exclusively to Venezuelan products — agricultural, mineral, and industrial—which, when somewhat more advanced, will certainly prove of great value to Americans coming to this country and desiring to inform themselves regarding Venezuela's natural resources and the general possibilities which it affords for the profitable investment of American capital. This department of the work is receiving the most hearty support from the Venezuelan Government, the various chambers of commerce, and the great Agricultural Council, which latter is a Government institution composed of officials of the Agricultural Department and several of the leading planters of the country, who are seeking to foster agricultural interests by the introduction of modern machinery and methods. This body is particularly interested in the work of the warehouse and has offered its most hearty cooperation in every way. It has placed its experimental station at the disposal of the institution for the practical demonstration of the use of all kinds of agricultural implements, and an intelligent young man who has a thorough practical knowledge of this branch, one who knows what kind of a plow should be used for different soils and who can actually go out into the field, if need be, and prove the superiority of a modern American plow, would certainly succeed in course of time in building up a large and profitable business for himself, provided he has the tact and patience to overcome the obstacles which he will unquestionably encounter in the beginning.

In this connection, I want to emphasize that the American warehouse affords exceptional opportunities to our young men who are desirous of gaining a knowledge of the Latin American markets. In recent report of Consul Plumacher, at Maracaibo,* he has fully dwelt upon this subject, and I merely wish to call the attention of our young men to this institution and advise every one who thinks of "going south" to apply to the main office of the National Association of Manufacturers, the Bourse, Philadelphia, for the circular published by them on this subject and entitled "Practical education in foreign trade," herewith given. Let it be understood, however, that what is wanted here are not "jacks-of-all-trades" or so-called

* See CONSULAR REPORTS No. 214 (July, 1898), p. 360.

"all-around men," but young, intelligent, well-informed Americans, who have the patience and perseverance necessary to attain the success which these preeminent qualities of our German competitors have gained for them.

PRACTICAL EDUCATION IN FOREIGN TRADE METHODS.

In planning the establishment of a system of sample warehouses in the leading markets of the world, the National Association of Manufacturers has made provision for certain features of a distinctly educational character, designed to afford to young Americans facilities for practical study of foreign trade. The general features of this plan as applied to the first warehouse in the system, which is soon to be opened in Caracas, Venezuela, represents the general principles of this idea.

It is proposed to make this warehouse, so to speak, a "post-graduate commercial course," thus giving young Americans an opportunity for gaining a thorough knowledge of the Latin American market without entailing the great loss of time that is ordinarily met with when acquiring this knowledge by serving as "volontaire" in some native establishment. Among others the following remarkable facilities will be afforded:

(1) Study of the Spanish language by the aid of competent teachers, including such work as the translation of catalogues, circulars, letters, etc.

(2) Practical correspondence in Spanish and English, banking, collections, etc.

(3) Practical study of commercial laws, including tariff, custom, patent, and trade-mark regulations, etc.

(4) Thorough study of freight and transportation routes, rates, and everything pertaining to the shipment of goods.

(5) Practical office work.

(6) A thorough study of some particular branch of the various lines represented by exhibits, as nearly as possible in harmony with the personal preferences and previous training of the applicant, by giving him charge as general representative of such department after he has acquired the needed training for such work.

For example, if the applicant should be assigned to the hardware department, it would be his duty to gather, with the aid of the general management of the warehouse, all information referring to that particular branch, such as:

(*a*) General information regarding specific lines of hardware sold in Venezuela.
(*b*) Selling prices of various articles.
(*c*) Cost of these goods.
(*d*) From what countries they are purchased.
(*e*) Their quality as compared with American goods.
(*f*) Import duties in Venezuela.
(*g*) Freight rates to Venezuelan ports.
(*h*) How goods should be packed.
(*i*) Quantities imported annually into Venezuela.
(*j*) The extent of the possible trade.
(*k*) Names of leading responsible merchants, etc.
(*l*) Other information which experience may suggest.

In this manner an opportunity is afforded for gathering invaluable knowledge of the special business customs of the country, as well as a good general, all-around business experience.

The association does not ask any pay for these facilities—all that is required is that the applicant shall agree to remain with the institution at least twelve months, and during that time faithfully and intelligently perform the work assigned to him. The cost of living for single young men is not high if they are inclined to be at all economical, the conditions in this respect resembling those of the larger cities in

the United States; so that if a young man will embrace his opportunities during a stay with the warehouse for a term of, say, eighteen months, at a cost which need not exceed $1,000 to $1,500, he will have gained an experience that will make him worth three or four times that amount per annum to any enterprising American firm.

That such a training affords countless opportunities to those who possess the same, need hardly be emphasized. There is a constantly growing tendency among American manufactures to reach out and gain a footing in the South American markets, and it is primarily the lack of experienced men that has seriously impeded his movement in the past.

Much of the success which British and German manufactures and merchants have attained in their foreign trade is due to their practice of sending their sons or trusted employees to reside in foreign countries for the purpose of studying their trade and methods. It is the aim of the National Association of Manufacturers to provide by its warehouses facilities for accomplishing the same results.

PLAN OF ORGANIZATION OF THE WAREHOUSE.

To the visitor who is shown through the building, perhaps the most impressive feature about the institution is the neatness and system which is everywhere apparent. There is a place for everything, and everything is in its place. The voluminous correspondence is handled in a most practical manner, which fact is especially appreciated by the visiting merchants. It is divided into fifteen general groups or departments, and to each day of the week are assigned from two to three subjects, according to their importance, which are herewith given in full, as they will serve to give a more complete idea of the institution:

MONDAYS.

(*a*) Administrative matters—*i. e.*, everything relating to the general policy and conduct of affairs of the institution, as well as all financial matters.

(*b*) Employment—*i. e.*, matters relating to the various parties employed or who have made application for employment.

TUESDAYS.

(*c*) Installation and care of exhibits and everything connected therewith.

(*d*) Maintenance of building, repairs and improvements of same, etc.

WEDNESDAYS.

(*e*) Prospective exhibitors, that is, those who contemplate exhibiting or for whose goods there has been special inquiry.

(*f*) Subscribers, that is, all matters which concern the interests of the various exhibitors, reports on the number of inquiries received for their goods, etc.

THURSDAYS.

(*g*) Library—*i. e.*, catalogues and periodicals and all subjects pertaining to same.

(*h*) Department of information—*i. e.*, the answering of all inquiries received from Venezuelan and American manufacturers.

(*i*) Department of patents and trade-marks—*i. e.*, everything relating to the registration of patents and trade-marks for American manufacturers in Venezuela.

FRIDAYS.

(*k*) Government matters—*i. e.*, all official communications, petitions, etc.

(*l*) Shipping and clearing exhibits at custom-house.

(*m*) Newspapers—*i. e.*, all correspondence and negotiation for advertisements with the native press, as well as general propaganda in American journals.

SATURDAYS.

(*n*) General propaganda—*i. e.*, means and ways other than through newspapers for making the warehouse work known.

(*o*) Venezuelan department, relating to the development of this feature of the institution.

(*p*) Sundries—*i. e.*, various matters not possible to classify under foregoing groups.

Each day's work under these various headings is well defined, and each of the various employees has his particular part of the same assigned to him in a clearly defined list of duties, rules, and regulations, so that the whole institution works with machine-like regularity.

The main office of the association at Philadelphia is kept in constant touch with all that is going on by receiving duplicate copies of all letters written, as well as full reports of the progress of the work made under each heading. A very unique system for the classification of information is used, by means of which it is possible to ascertain immediately in what particular lines local merchants and planters, as well as visitors to the warehouse in general, are interested.

COST OF EXHIBITING.

In a neat sixteen-page pamphlet on the subject, the National Association of Manufacturers gives full information regarding the cost and conditions of exhibiting at the Caracas warehouse. The cost is so light, that it is to be hoped American manufacturers will promptly avail themselves of the opportunity. This is no doubt the most effective means of introducing American goods in this market that has ever been devised.

An investment of $25 or $50 will secure a space of 5 to 10 square feet, respectively, sufficient for the average exhibit. Add to this the freight and landing charges and a small charge for installing the exhibit (from $2.50 to $10, according to size and weight of exhibit) and a slight rent for show case or table, which are supplied by the association if desired, and it may be said that for the small sum of $50 to $75 a manufacturer has an opportunity of reaching the buyers of Venezuela and has an absolute guaranty that his interests will be carefully guarded.

The management assists manufacturers in securing competent and reliable agents for their respective goods, and in every way tries to facilitate the building up of trade.

In conclusion, I give herewith a list of articles which from personal observations and information received from numerous reliable sources I feel certain will find a good market here, if manufacturers will be willing to make a little effort in securing the trade.

Hardware.

(1) Builders' hardware.
(2) Carpenters' tools.
(3) Machinists' tools.
(4) Household hardware.
(5) Cutlery.
(6) Bicycles.
(7) Paints, varnishes, and oils.
(8) Window glass.
(9) Rope and twine.

Hardware (heavy).

(1) Blacksmiths' tools.
(2) Wagon and carriage parts.
(3) Carriage hardware.
(4) Axles and springs.
(5) Horse and mule shoes.
(6) Bar iron and steel.
(7) Tin plates.
(8) Pig iron.
(9) Plumbing materials.

Machinery.

(1) Engines and boilers.
(2) Pumping machinery.
(3) Metal-working machinery.
(4) Wood-working machinery.
(5) Shoe and leather machinery.
(6) Mining and hoisting machinery.
(7) Milling machinery.
(8) Printers' machinery.

Machinery (2).

(1) Shafting, hangers, and pulleys.
(2) Belting.
(3) Factory supplies in general.
(4) Wrought-iron pipe.
(5) Valves, pipe fittings, etc.
(6) Portable forges.
(7) Contractors' tools.
(8) Wire rope.
(9) Blasting powder, etc.

Electrical goods.

(1) Electrical machinery.
(2) Electric-railway equipment.
(3) Telegraph and telephone material.
(4) Wire for electrical purposes.
(5) Electric-light fixtures.
(6) Electrical supplies in general.
(7) Telegraph poles.
(8) Electric medical apparatus.
(9) Electrical instruments.

Agricultural machinery.

(1) Planters and seeders.
(2) Plows and cultivators.
(3) Threshers.
(4) Coffee, sugar, and rice machinery.
(5) Farming tools.
(6) Dairy supplies.
(7) Windmills and tanks.
(8) Barb wire and fence material.

Vehicles and harness.

(1) Fine carriages.
(2) Light business wagons.
(3) Heavy wagons and carts.
(4) Harness and saddlery.
(5) Carriage material.
(6) Carriage hardware.
(7) Children's vehicles.

Building material.

(1) Lumber.
(2) Sash, doors, and blinds.
(3) Mantels, stair work, etc.
(4) Building papers.
(5) Window glass.
(6) Paints and oils.
(7) Roofing slate.
(8) Corrugated iron.
(9) Ornamental sheet-metal work.

House furnishings.

(1) Carpets and rugs.
(2) Oilcloth and linoleum.
(3) Window shades and fixtures.
(4) Lamps.
(5) Stoves and ranges.
(6) China and glassware.
(7) Wooden and willow ware.
(8) Kitchen utensils.
(9) Refrigerators.

Furniture.

(1) Upholstered furniture.
(2) Hard-wood furniture.
(3) Rattan furniture.
(4) Brass and iron bedsteads.
(5) Mattresses and pillows.
(6) Carpets and oilcloth.
(7) Draperies and upholsteries.
(8) Office furniture and safes.
(9) Billiard and bar fittings.

Dry goods.

(1) Dress goods.
(2) Prints, ginghams, etc.
(3) Sheetings, shirtings, etc.
(4) Blankets and counterpanes.
(5) Table linen and towels.
(6) Handkerchiefs.
(7) Hosiery and underwear.
(8) Millinery.
(9) Small wares and notions.

Wearing apparel.

(1) Clothing.
(2) Hats and caps.
(3) Haberdashery.
(4) Hosiery and underwear.
(5) Umbrellas and canes.
(6) Rubber clothing.
(7) Army and navy uniforms.
(8) Trunks and travelers' requisites.

Jewelry.

(1) Watches.
(2) Clocks.
(3) Jewelry.
(4) Objects of art.
(5) Silverware.
(6) Table cutlery.
(7) Cut glassware.
(8) Optical goods.

Musical instruments.

(1) Pianos.
(2) Organs.
(3) Musical instruments.
(4) Sheet music and books.
(5) Musical material.
(6) Musical publications.

Paper and stationery.

(1) Printing paper.
(2) Wrapping paper, bags, and twine.
(3) Folding boxes, wooden dishes, etc.
(4) Printing offices and stationers' sundries.
(5) Books and periodicals.
(6) Toys and games.
(7) Artists' materials.

Sporting goods.

(1) Firearms and ammunition.
(2) Fishing tackle.
(3) Photographic goods.
(4) Sportsmen's clothing.
(5) Gymnasium supplies.
(6) Games and toys.
(7) Camping outfits.
(8) Rowboats.

Food products.

(1) Groceries.
(2) Flour.
(3) Hams, bacon, pork, and lard.
(4) Butter and cheese.
(5) Artificial butter.
(6) Canned or bottled goods.
(7) Wines and spirits.
(8) Malt liquors.
(9) Confectionery.

Drugs and chemicals.

(1) Drugs.
(2) Patent medicines.
(3) Fine chemicals.
(4) Toilet Articles.
(5) Druggists' sundries.
(6) Heavy chemicals and acids.
(7) Alcohol.
(8) Bottles.

Hides and leather.

(1) Hides and skins.
(2) Sole leather.
(3) Upper leathers.
(4) Morocco and glazed kid.
(5) Patent and enameled leathers
(6) Fancy leathers.
(7) Belting leather.
(8) Harness leather.
(9) Cut soles and findings.

LOUIS GOLDSCHMIDT,
Consul.

LA GUAYRA, *July 20, 1898.*

THE QUEST FOR EXPORT MARKETS.

The search for foreign markets may be justly said to have developed in recent times into an exact, specialized science, in which not only individual exporters and associations, but expert government commissions, elaborately organized, equipped, and maintained, each play, with constantly increasing efficiency, their coordinate rôles. From a notoriously backward position—the result of long and implicit reliance upon home markets—the United States has now reached a position from which the usefulness of export associations and bureaus of information is generally recognized, although the complaint is sometimes heard that these organizations have been thus far rather too much in the hands of theorists and unsuccessful men, and are not sufficiently controlled by merchants who have had successful experience and practical training in foreign trade.

Meanwhile, some of the leading European nations have advanced one important step further in the science of export, and have called into service the expert commission, organized for a specific inquiry and sent out under government authority to gather precise technical information for the education of manufacturers and merchants in special lines of production and trade. The efforts of Germany and France in this direction have established a new record, to which the attention of American manufacturers and exporters can not be too soon or too seriously directed.

As has been stated in various consular reports, the German export commission which went out in February, 1896, to study the markets of China, Korea, and Japan, returned after a year of thorough and carefully systematized work, bringing a vast collection, not of the art products or other merchandise ordinarily exported from those countries, but of the ordinary textile and other goods made in Japan and China for the use of their own people or for export to neighboring countries, and in the production of which it is thought that German manufacturers, equipped with exact information as to sizes, quality, price, and extent of demand, might be able to compete.*

Neither the samples brought nor any of the numerous special reports made by the commission have been, or probably will be, made public. The samples were arranged in a suite of rooms in an upper story of the Palace of the Imperial Diet at Berlin, where admission was granted by card, to be obtained from a discreet official.

* See "Exhibition of eastern manufactures in Germany," CONSULAR REPORTS No. 214 (July, 1898), p. 459.

The collection was subsequently broken up and distributed to the points where similar goods are, or can be, made in Germany, as, for example, at Crefeld, where the textile samples are in possession of the chamber of commerce. The reports, if printed at all, will be presumably reserved for confidential distribution among the German manufacturers and merchants who are specially interested in knowing the wants of eastern peoples, their ability to purchase goods to meet those wants, and the prices that they are able to pay for them.

Similarly in France, the commercial mission sent out by the chambers of commerce of Marseilles, Roubaix, Lille, Bordeaux, and Lyons has returned after an absence of nearly two years, and has presented its collections and reports to the chambers of commerce directly interested. Although none of these technical reports have yet been or probably will be published, it is known that they number more than one hundred, each prepared by an expert committee or individual, and that the general conclusion reached by the commission is that French export trade to China, Tonkin, Anam, Cambodia, and Cochin China has before it a great future, provided manufacturing exporters will make the best use of the specialized information that is now placed in their hands.

While the direct and immediate fruits of these well-devised and scientific quests for foreign markets will fall naturally and justly to Germany and France, there are certain general principles and facts which are suggested by these proceedings which, if rightly appreciated, may be of value to the exporters of the United States, who, as a class, with of course many conspicuous exceptions, have so much to learn of the science of export trade.

There is in all the specialized work of these commissions a broad recognition of the fact that in foreign trade it is the buyer, not the seller, who determines the kind of article he wants and the form in which he wants it turned out, labeled, and packed for shipment to him. It is the business of the seller not to force upon the consumer something that he never heard of and does not want, but to ascertain exactly what he has used and sold hitherto and then furnish him with something of the same general kind—but better for his money—that he has had before. The exporter who succeeds best is, other things being equal, he who learns most accurately the wants of his customers and supplies them most nearly in the currency and on the terms and conditions to which the buyer is accustomed. At present the Germans are perhaps the ablest masters of this theory of export trade; the English are thought to have lost much for want of it, and Americans will undoubtedly excel in it when once they realize its importance.

Secondly, the goods must, as a principle, be sold not at home, but abroad. The seller must go to the buyer with samples, prices, and conditions which the latter can see and readily understand. No museums or other collections of sampled merchandise, however useful in some respects, can attract more than a very limited number of buyers to the United States, from remote countries in which competing nations are already offering their goods, imported there at the expense of the wholesale merchant or the manufacturing exporter. Circulars and catalogues, however skillfully prepared, which only inform the foreigner what he can buy in the United States in dollars, will not compete effectively with the German, French, or English merchant who is there on the spot with his goods, duty paid, and fluent salesmen to show and explain them.

The need of the period in our country is a class of competent, well-trained young men, with good manners, a practical command of French, German, and Spanish—one or all—combined with intimate practical knowledge of a certain class of manufactured goods and the commercial methods, currencies, weights, measures, and customs of foreign countries. The education of such men requires certain specialized courses of study which the commercial schools of Germany, and, to some extent, of Belgium and England, furnish, but which those of the United States, with perhaps some exceptions, do not. The all-round education provided by American colleges and high schools turns out young men more or less fairly equipped for successful careers at home; but the competition for export trade has now become so sharp as to require the work of experts, which only specialized education, supplemented by practical experience, can provide. It will henceforth be necessary that a largely increased class of young men shall prepare themselves for, and accept definitely, as so many thousands do in Great Britain and Germany, the career of mercantile employees in foreign lands, in which social sacrifices and the discomforts and even dangers of alien climates are balanced by the material advantages which such a career offers to energy, perseverance, and trained capacity.

Salesmen who frequently come to Germany with no knowledge of any language but English are seriously handicapped, and this disadvantage is still further increased when the traveler puts himself into the attitude of a peddler by attempting to sell goods of wholly different classes and character, as, for instance, shoes, machinery, belting, lumber, and bicycles. No man willing to accept the hard life of a commercial traveler is likely to understand fully all these diverse branches of trade, and his efforts to sell something concerning which he is ignorant are generally and deservedly abortive. Export syndicates have their distinct and often very important

uses, but their best results are accomplished when they represent most fully different products in one special line or department of trade.

American circulars and catalogues may be useful here in the few instances where they reach the hands of a customer who really wants a machine or other article which he knows something about; but for this purpose, they should be printed in the German language, give values in marks and pfennigs, and weights and measurement in metric units. Above all, the catalogues should state clearly the net price at which the machine or other article will be delivered at Hamburg, Bremen, or at least free on board at some leading American seaport. If this is not done and the buyer is left to spend three or four weeks in writing to the American maker to ascertain his best discount from list, the chances are that his order will go to a European manufacturer, who either sends a salesman to take it or who has given a net price in his advertisement.

The unprecedented merchandise exports of the past fiscal year have given to the world a new and convincing proof of the power of the United States in a vast and varied field of manufactures. The old theory that cheap production and high quality of product are incompatible with payment of just and liberal wages to labor has been definitely exploded. It has been demonstrated that the modern struggle for life, which has brought into use more complex and scientific machinery, so far from decreasing, rather increases and emphasizes the importance of the individual. The advantages of the United States consist, not only in its possession of profuse and excellent materials, but in its unequaled factory organization and the remarkable efficiency of its skilled operatives in every important line of manufacture.

The force of personal character—moral, mental, and physical—was never more potent than to-day, when it is equipped with the implements of modern invention. It is not the machine, the gun alone, but the man behind it, that wins the battles of to-day on sea or land, in the hot conflict of war or the busy rivalries of peace. As the field of American commercial activity broadens and grows more complex and difficult, the attainments and enterprise of exporters and their agents must keep abreast of the new and more exacting requirements. The merchant of the present and coming generations must be, like the diplomatic, the consular, or executive officer, a broader, more highly trained and educated man than his father or grandfather had need to be.

No people are gifted with quicker apprehension, a more ready and unerring grasp of the opportunities and requirements of a new situation, than those of the United States. That they will master

the science of international commerce as they have those of cheap transportation and effective production, is as certain as that the closing years of the century are opening for the Republic a new and momentous period of activity and national importance.

FRANK H. MASON,
Consul-General.

FRANKFORT, *August 1, 1898.*

NEW FIELDS FOR UNITED STATES MANUFACTURES.

The manufacturers in the United States who are looking for new fields for their products, can now turn their attention to France. While it is true that certain lines of trade are really overdone in this country, there are others that promise good returns.

Attention is called to the following openings, which seem to offer profits to firms entering the markets immediately:

Men's hats.—Reference is particularly made to fine straw and felt hats. The best qualities of hats are imported into France by the large Parisian stores; British manufacturers almost entirely supply the trade of the large department stores in Paris and those in the provinces. Fine silk, rabbit hair (such as derbies and soft felts), and the finer grades of straw hats are manufactured out of France. The material from which the straw hats are made is identical to that used in making the fine straw hats so common in America, and which is imported from Italy. These Italian braids are largely exported to the United States and Great Britain.

The attention of American manufacturers is called to the unscrupulous action of certain French dealers who put fictitious names in their hats with "New York" as the address of the maker. This is done to attract buyers, who think that they are purchasing fine foreign hats. This practice has been brought to the notice of United States consuls several times. The merchandise offered under these fictitious names is generally inferior in quality. This shows that American manufacturers exporting to European countries should have their trade-marks registered. It is heartily recommended to American hatters to study the French market.

Preserved meats.—The American brands are not unknown to European buyers, as some kinds of our preserved meats have been sold in France for many years. Just now, however, there is special reason for activity in this line, because two or three of the establishments that have been erected in France to overcome the importation of American preserved meats have recently met with unfortunate experiences. According to the newspapers, a large number of soldiers at

the Tours barracks who were supplied with French preserved meats have been poisoned, some recovering, but others succumbing. The French packers have not the supply, nor do they possess the experience, of the largest and best equipped American factories of preserved meats.

Dried, canned, and preserved fruits.—This trade has been growing steadily, and this year's importations promise to be larger than ever. Five years ago, the writer imported some dried apricots, pears, and raisins and canned apricots, peaches, plums, cherries, and Bartlett pears; they were the first of this class of goods ever brought into this district. The demand for these fruits from the United States now surpasses that from any other country, not excepting France. Our manufacturers in this line should be well represented in all European countries. The samples must be attractively packed and on the market early. Sales are sure, because the demand can be relied upon.

Iron and steel.—Heretofore, certain grades of iron have been imported from Spain and Great Britain into France; but, as the price of these products grows dearer, pig iron and Bessemer pig will be imported from the United States, if advantageous freight rates can be secured. The high price of wheat and the great demand on this side makes eastward freights very high; and, as iron and steel can not be exported unless the rates are very low, this industry has been neglected. France is ambitious now to make improvements in her marine service, and it is probable that the prices of these commodities will advance. Now is the time for Americans to make an assault on the iron and steel market of Europe.

Machinery.—One effect of the Spanish-American war has been to give Europeans a better knowledge of the ability of the United States to manufacture instruments of precision. American watches and clocks have long been regarded as marvels of correctness in time keeping; but, as was recently stated by a leading Frenchman, "America has astonished the world with the accuracy of her implements and machinery; her steel ships resist and endure better than those of other and older countries. Her intricate machinery does not get out of order so quickly and stands crucial tests far beyond the power of European apparatus, and there are fewer failures, because there are fewer defects; this is due to her implements of precision." It would be well to take advantage of this reputation and show what can be done by the American workmen; especially in the line of engines, locomotives, tools for cabinetmaking, all sorts of die-cutting machinery, and machines used in the manufacture of firearms of all classes. As France is seeking more and more to do her own manufacturing, she will naturally turn to the country that can sell her the

best machines to accomplish her aims. These kinds of machinery should be well represented in France at all exhibitions.

A careful study should be made, not only of the needs of the French market, but of the best and quickest way of meeting them.

As has often been stated, the best man to do business for America is an American speaking the native tongue of the country to which he is sent. He will do more in less time, and do it more satisfactorily, than any foreigner.

WALTER T. GRIFFIN,
Commercial Agent.

LIMOGES, *July 19, 1898.*

AMERICAN MANUFACTURES ABROAD.

Consul-General Stowe sends from Cape Town, under date of June 20, 1898, a report from a commercial traveler of over fourteen years' experience in South Africa, Egypt, Persia, India, China, and Japan. The report reads, in part:

There is hardly an article manufactured in the United States for which a good demand does not exist in foreign countries, due either to the excellence of the goods or the reasonable cost. Many articles of higher price than those offered by other countries will sell, simply because they come from the United States, on account of the reputation that American exports have won.

If the sale of manufactured articles abroad has been small compared with the demand, the fault lies with the manufacturers themselves.

The agents of export houses of the United States traveling in foreign countries sell goods on a commission of from 2½ to 5 per cent. The houses themselves, and, of course, the travelers, are necessarily interested in getting orders for goods which sell in large amounts, or are already well introduced, because they want to gain the commission. They always try to sell staple articles, or such manufactured goods as are already known; and hardly ever take the trouble to increase sales by introducing the goods of a new manufacturer. Commercial travelers take catalogues of many manufacturers, but they first show samples of goods already introduced and are satisfied to get an order for these special lines.

For each manufacturer a market and demand must be created. He should bring his own goods direct to the market, and, once introduced, the commission house will gladly do the further work of filling orders or taking new ones, because the goods will be wanted by the customers.

It would be an error to think that the introduction of new goods will mean a decrease of exports of the old ones. The latter would sell in naturally increased quantities, while the new lines will create an independent demand. The competition will be, not with American, but with German, English, and other foreign manufacturers.

The exporter says with reason that he can not pay his men and have them spend time in introducing the line of each manufacturer who desires it; the manufacturer himself must take the first step, and create the demand.

The objection of expense can be met by a method which has been adopted with success by Germany, Austria, France, Italy, etc. From ten to twenty manufacturers of different lines combine in sending out a man who understands the business

of traveling and selling goods. This man works solely in the interest of the manufacturers, introduces their goods, and takes orders. The orders may be filled by the manufacturers direct, or may be turned over to some of the different export commission houses in America. These arrangements should be made before starting out, in order that the buyers can be informed at once when and how goods will be shipped.

If twenty of our manufacturers combine thus for, say, one year, the expense to each would be about $300 to $400. This amount should cover traveling expenses, the opening of sample rooms in different places in order to display the goods and take orders, the cost of licenses, etc.

Our manufacturers should not let foreigners win markets which United States goods would control, if they were only obtainable.

UNITED STATES SHOES IN ENGLAND.

An American manufacturer of men's shoes has effected an arrangement with the proprietors of a well-known Birmingham shoe store, by which the productions of the American factory are given a fair show, but at prices somewhat in advance of those of the same grade in the United States. This advance is probably due to the fact that British shopkeepers demand and get a higher percentage of profits on all goods than do American retail merchants.

It is, however, strange and very annoying to one interested in American trade, that a manufacturer enterprising enough to establish agencies in London and also in the provincial cities of Great Britain should have given so little thought and study to the needs of the market he is seeking. He has three styles of shoes on sale, viz, patent leather laced, calfskin buttoned, and tan laced. The patent leather would perhaps go better if a button shoe, the black calfskin should certainly, I think, be laced, and all are far too light soled for the unquestioned climatic demands here. The one style of toe, also, is of too extreme a point to suit English taste. While in the United States the drift in style is away from the pointed, the bulldog and half bulldog toes gaining in popularity, it must be acknowledged that there is a tendency here toward a pointed toe, though it will never be the sharp point we know in America. The majority of Englishmen wear "pumps" to balls and other indoor evening entertainments, and they might be ready to adopt as a more convenient and useful substitute the light-soled and pointed American patent-leather shoes with their splendidly finished uppers; but the calfskins and tans are too thin soled for this climate, even for Americans living here, and in a few weeks I shall have to add an extra thickness of sole to the shoes I have bought.

It seems to me also that a representative of an American house

might, when in Birmingham, have found it to his advantage to have called on the American consul to obtain a list of the Americans temporarily resident here, who would immediately become customers of the new agency; and I must remark that it is with regret that I hear of so many Americans coming here on business who do not call to see if I can be of assistance. I know that those who do frequently get a pointer or two of value, and by having made their acquaintance and having learned their business I can frequently be of service to them after they have left. To an American salesman who called a little time ago, I could only suggest the name of one concern who might buy his goods; but since then I have learned of two others and have sent the names to him, and by an incidental street conversation this morning with a large manufacturer, I have probably obtained for him an experimental order which may mean much in the future. At any rate, this manufacturer was so much interested that he took the address and said he would write for figures.

MARSHAL HALSTEAD,

BIRMINGHAM, *August 9, 1898.* *Consul.*

OUTLOOK FOR AMERICAN MANUFACTURES IN MUNICH.

Consul Nusbaum writes from Munich, under date of July 2:

Several of the principal shoe dealers in Munich sell American-made shoes, but only on a small scale. There are from one thousand to fifteen hundred English-speaking residents in the city, two-thirds of whom, I am confident, would buy American shoes if their tastes could be suited. Our large shoe manufacturers at home can build up a lucrative trade in this country if they will open stores in the principal places, with a stock complete enough to meet the requirements of German buyers. Several young men of my acquaintance go to the expense of importing shoes from the United States for their own personal use. As a rule, Bavarians have their shoes made to order, and sizes run somewhat shorter than in American makes.

A representative of a number of Boston shoe manufacturers was very successful in Hamburg, Berlin, and Dresden. He visited Munich a few days ago, and had little trouble in securing orders.

Sending English circulars and catalogues is no way to induce Germans to buy American-made articles. People here want to be talked to. They like to see the real manufactured article. Engravings and catalogues do not impress them.

The German duty on shoes is 50 to 70 marks per 100 kilograms ($11.90 to $16.65 per 220 pounds).

American-made chairs come in parts and unpolished, and are on sale here.

I am convinced that this district would become a profitable market for American-made roller-top desks, brass bedsteads, washing machines, and wringers, if the proper method of introducing them were adopted.

AMERICAN GOODS IN SWITZERLAND.

Zurich is the great distributing point in Switzerland for most of the imports that come from the United States, and consequently through that channel a knowledge of the conditions of trade must be obtained. At my request, Consul Lieberknecht and Vice-Consul Germain have furnished me with some interesting statements concerning the kind of articles that have been introduced into Switzerland, largely through the efforts of the Zurich consulate, and especially through the activity of Vice-Consul Germain, who has given much attention to the work of building up American trade with the Alpine Republic.

The following are some of the articles of American maunfacture and production that have found their way to the Swiss market since July 1, 1897. I give the names of the articles and the States from which they come:

Articles.	States.
Lumber and logs in cargo lots	Maryland.
Wood-working machinery and tools	Pennsylvania.
Wood-working machinery	Ohio.
Iron-working machinery and tools	Ohio and New York.
Lathe and shapers	New Jersey and New York.
Emery wheels	Lancaster, Pa.
Railroad iron	Illinois and Pennsylvania.
Iron wheels and wheelbarrows	Ohio.
Roller-top desks and other office furniture	New York and Michigan.
Cigarettes	Missouri.
Smoking tobacco	Maryland and Missouri.
Kaw tobacco	Maryland and Virginia.
Ironing machinery for laundries	New York.
Agricultural implements	Ohio, New York, and Indiana.
Agricultural machinery	Do.
Phonographs (Edison's)	New York.
Ice-cream freezers	Do.
Arms (rifles and revolvers)	Connecticut and New York.
Road carts	Ohio.
Wagons and carriages (but few)	Ohio and Indiana.
Dump wagons	Do.
Steel for drilling purposes	Pennsylvania and New Jersey.
Picks and shovels	Pennsylvania, New York, and New Jersey.
Tools of all kinds	Sundry States.
Street-sweeping machines	Illinois.

Articles.	States.
Rubber goods	New Jersey.
Canned vegetables	Pennsylvania.
Canned fruits	California.
Dried fruits, all kinds	Do.
Honey	Do.
Pampas plums	Do.
Wines	Do.
Wheat	Kansas and Minnesota.
Mustard seed	California.
Grass seed	Kentucky.
Cast-iron, porcelain-enameled sanitary appliances, as bath tubs, lavatories, sinks, water-closets, etc.	Pennsylvania.
Steam, water, and gas fittings	Pennsylvania and Illinois.
Steel and iron tubes	New York and Pennsylvania.
Steel ceilings (trial order)	Ohio.
Ladies' and men's shoes	Massachusetts and Wisconsin.
Sole and other leathers	Maryland, New York, Massachusetts, and Louisiana.
Machinery belting, leather and rubber	New York, Maryland, etc.
Pianos (to a small extent)	New York.
Organs	Massachusetts.
Patent money drawers	Ohio.
Cash registers	Do.
Provisions (hams, sides, lard, and Salami and other sausages)	Illinois, Wisconsin, Massachusetts, and New York.
Cotton-seed oil	Texas.
Standard Company coal oils	New York.
Raw cotton	Texas and Louisiana.
Inkstands	Massachusetts.
Photo library paste	Do.
Inks and mucilage	Do.
Bicycles, tires, and other accessories (all of the best makes are represented in Switzerland).	Ohio and other States.
Typewriters (different makes)	New York and other States.
Collars, cuffs, and shirts	New York.
Writing, bond, and ledger papers	Massachusetts.
Blotting paper	Virginia.
Coffee mills	Ohio.
Corncob pipes	Missouri.
Photographic supplies and apparatus	New York and other States.
Tubular lanterns	New York.
Picture hooks and wire	Massachusetts and New York.
Picture frames and moldings	Massachusetts.
Furniture and other hardware	New York, Pennsylvania, New Jersey, Illinois, etc.

There are many other articles, at present not important enough to mention, but the sale of which may develop considerably in future.

JAMES T. DUBOIS,
Consul-General.

ST. GALL, *July 11, 1898.*

CALIFORNIA WINES IN BELGIUM.

A report of the Belgian consul at San Francisco, Cal., relative to the production of wines in the United States, appearing in a recent number of the Journal de Commerce de Verviers, states that ordinary red wine can be put down in Antwerp at $7.28 per hectoliter (26.417 gallons). I have it from competent authority that good red wines of California of a rich, dark color and containing from 14 to 17 per cent of alcohol, can be delivered on board vessel at the port of Antwerp for about 30 centimes (5.8 cents) a liter (1.0567 quarts). These wines, on account of their dark color, are valuable for mixing with other wines—Italian or French.

The population of Belgium, from the last official census (December 31, 1897), was 6,586,593; men, 3,285,543; women, 3,301,050. The city of Liege contained at that date 167,805. Is Belgium a profitable and possible field for the introduction of American wines in large quantities, of which the United States produced 25,234,000 gallons in the year 1897?

I will present some official statements relative to the consumption of alcohol in Belgium and the means employed to combat the alcoholic habit. According to the number of inhabitants, Belgium is reported to consume more alcohol than any other country. Seventy-five million liters (19,813,125 gallons) are used annually as a beverage, which is 12 liters (12.88 quarts) per annum per person. The population of Belgium has increased since 1870 by 24 per cent; the consumption of alcohol has augmented by 54 per cent.

Strenuous efforts in various ways are made by public and private authorities to combat the ever-increasing alcoholic habit among the Belgian working classes. One plan presents the possible means of introducing our cheap, pure, and wholesome wines into this country. The Société des Mines et Fonderies de Zinc de la Vieille Montague, at Angleur, near Liege, employs between 10,000 and 11,000 persons, who receive in wages annually the sum of $2,000,000. In their own defense, and to ameliorate the condition of their workmen, which had become demoralized by the use of alcohol, the company imports ordinary wines from Italy and Spain, which cost on board vessel at Antwerp $5 per hectoliter (26.417 gallons). The wines are sold to the company's men at about 6 cents a liter (1.0567 quarts). The director of the company writes me:

> The consumption of wine in our establishment has, since our first attempts to fight the ravages of alcoholism among our workmen, increased immensely. Since 1896, our workshops have consumed 300,000 liters (79,252 gallons), of which

60,000 liters (15,850 gallons) were of Spanish wine, the rest Italian. In 1896, there were consumed 22,000 liters (5,811 gallons); in 1897, 172,000 liters (45,438 gallons); and in the first four months of 1898, 94,000 liters (24,830 gallons).

It would appear that as the ordinary red wines of California are superior in color and strength to the same kinds of Italian wines, our wine producers could successfully compete for this and other similar trade in this country.

In this connection, I beg to remark that printed matter in the English or any other language will avail nothing. The business, if obtained, must be by personal solicitation, and the goods if furnished must be fully up to samples.

Other countries introduce their wines into Belgium through large houses of good standing, who, after a serious effort, know where the wines can be sold, and thus establish a permanent trade for the different brands which they keep in stock.

Antwerp is the great seaport of Belgium and is also the principal commercial city, from which all parts of the Kingdom can be reached by railway in a few hours. I would suggest that all American firms intending to do business in Belgium locate their representatives at that point.

HENRY W. GILBERT,

LIEGE, *July 23, 1898.* *Consul.*

FOREIGN BLENDING WINES IN GERMANY.

The fact that, according to statistics just published, 81,000 hectoliters (2,139,777 gallons) of foreign blending wines were consumed in Germany in 1897 ought to induce our American wine exporters to turn their attention to the German market.

Of the above quantity, 64.7 per cent came from Italy. France furnished 18.2 per cent; Greece, 8.2 per cent; Austria-Hungary, 6.4 per cent; Turkey, 2.2 per cent; and the United States, 0.3 per cent.

Of German native wine, 137,511 hectoliters (3,632,628 gallons) were mixed with those quantities, viz, 95,433 hectoliters of red wine, and 42,078 hectoliters of white wine. The proportion of the blending (mixing) wine with the other is 0.59 to 1. The regulations issued by the Federal Council and now in force do not admit of more than 150 per cent of blending wine in the case of white wine and 50 per cent in the case of red wine to be added.

Statistics show, upon the whole, that a full and heavy wine finds more favor in north Germany and beer-drinking Bavaria than with the inhabitants of the southwestern German wine countries.

The process of wine blending was performed very little by the wine growers themselves; the wine dealers usually have charge of it.

I feel sure that the above figures, taken from the Imperial German statistics, will be an incentive to our American wine exporters to be more active in the German market. There is no reason why they should not be successful.

LOUIS STERN,
Commercial Agent.

BAMBERG, *July 21, 1898.*

TRICHINÆ: GERMAN INSPECTION OF AMERICAN HOG PRODUCTS.

Consul Barnes sends from Cologne, August 3, 1898, a report upon trichinæ, and adds that the health officials of Cologne recently had in their possession two sides of American bacon in which it was claimed evidences of trichinæ were found. This meat came in a shipment of twenty-five cases. The report reads:

Through the medium of a society of German foreign meat importers whose object is the protection and promotion of the German trade in meats and fat products, I learn that for the last fifteen years, beginning with the decree of 1883 prohibiting the importation of American meat, and ending with the close of last year, there were officially confirmed in the Kingdom of Prussia 3,003 reported cases of illness from trichinæ, 207 of which resulted in death. Of these total numbers, there could be traced to the eating of European meat, examined in Germany and found to be free from trichinæ, 1,242 cases of illness and 102 deaths. Thus, 41.35 per cent of all the cases of illness and 49.7 per cent of all the deaths were caused by the consumption of European pork, which was examined in Germany and found to be free from trichinæ. The remaining cases could also be traced to importations of European meat, partly examined and partly not examined, and found to contain trichinæ, and yet handled by the trade.

In not one of the above 3,003 cases could it be proved that the illness was caused by the use of American salted, pickled, or tinned meat, nor by smoked sausage (imported under imperial decree of September 3, 1891). This statement holds good for all Germany. In confirmation of this fact, the society hereinbefore mentioned has issued posters wherein a reward of 1,000 marks ($238) is offered to the person who can prove that trichinæ have been transferred to human beings by the consumption of American salted or pickled pork or smoked sausage imported under the imperial decree of September 3, 1891, canceling the edict forbidding the importation.

The inspection of American meats and sausages is much more rigid than the tests for the German home products. The American product is twice inspected. Before the meat leaves the United States, I am informed that from each hog, as a whole, the inspector selects six samples or pieces, and from these pieces are taken eighteen cuts, to which is applied the microscopical test. When this meat reaches Germany it is again cut into eight or ten pieces; from each of these the inspector selects three samples or pieces, and from each of these samples or pieces three are taken for the microscopical test. This results in the inspection of ninety separate pieces from the American hog, while in the inspection of the German hog only eighteen pieces are tested. By this mode of inspection it can be readily seen that opportunities of discovering ten cases of trichinæ are available in the inspection of an American hog, as against two chances in the case of the German hog. When inspected, the German hog is divided into two pieces only, being severed lengthwise, from the head down the back, thus leaving the head still attached to both of the divided parts of the body.

As regards the inspection of American sausage, I learn that in this district (Cologne) three pieces are taken for inspection purposes from 2 pounds of imported sausage. Even if no trichinæ are discovered after this rigid inspection, the sausage is much injured, if not entirely ruined, for selling purposes, inasmuch as this process not only has a tendency to cause the meat to become dry and hard, but it bears plain evidences of having been subjected to an inspection, which is not a very flattering testimonial as to its worth or desirability as food. On the other hand, German sausage is subjected to no such examination, since the meat is inspected as hereinbefore stated, thereby escaping the rigid and damaging process followed in the German inspection of the American sausage.

When, in 1891, the edict against sausage and pork products from America was canceled, no inspection of sausage or pickled pork was required until July 1, 1898. Since then, both products are subjected to inspection. This will result in the absolute exclusion of sausage and pickled pork or boneless hams from the German market. In the case of boneless hams, weighing from 2 to 3 pounds each, the cost of inspecting amounts to 15 pfennigs per kilogram, or 15 marks ($3.57) per 100 kilograms of 220 English pounds. Add to this the duty of 20 marks, and we have a total cost of 35 marks, or $8.33 on 220 pounds of meat, which virtually means the prohibition of such products.

Other expedients also appear to be resorted to by self-constituted authorities in order to discourage and prevent the large consumption of American meats. There is now pending before the court at

Elberfeld, a town near Cologne, a suit relating to a case of meat from America which was packed in borax. It seems that the municipality of Cologne issued through the daily papers a notice or warning to dealers that such meats should not be handled or sold by them, alleging its use to be detrimental to the health of the consumer. Any citizen is permitted, under this order, to file a complaint regarding this kind of meat. As a consequence, when the Bürgermeister (mayor) issues his edict or warning, the dealers in meats are afraid to handle or sell the prohibited products. And this is done in spite of the fact that the Emperor alone has the power to prescribe the manner of packing or preparing human food.

The Bürgermeister of Solingen has exercised the same power as claimed by the Bürgermeister of Cologne, by indorsing and repeating this edict or warning in his district against the use of boraxed meats, and this action has resulted in bringing the case to the attention of the court at Elberfeld. The society for the protection of German trade and industry in foreign meats and fat products, is contesting this question and expects to be able to prove by distinguished German professors that the use of borax for packing meats is not injurious to human life.

I am likewise informed that uninspected American hog products have been introduced into Germany from Belgium, in boxes in which other regularly inspected meats had been received from America, bearing the label of microscopic inspection.

The following is a case in point:

Originally, in the microscopic inspections in the United States, the certificates thereof were the same as those given for usual ante and post-mortem inspections, with the addition of a red stamp placed on the certificate stating that the goods mentioned were microscopically inspected and found free from trichinæ. On one occasion a carload of bacon arrived at the custom-house of Aix la Chapelle, the certificate of which was without the red stamp. The custom-house officers refused to let the car enter Germany and reported the case to the buyer at Düren. This man wrote to the Antwerp firm that he refused to accept said car, because he was entitled to receive the meat regularly inspected as required by the German laws. The seller at Antwerp replied that, in fact, the meats in question had been regularly inspected microscopically, and it was by mistake that the certificate did not bear the red stamp; that such an error happened sometimes, but that the United States consul in Antwerp would rectify the certificate if the buyer would return it for that purpose. Unfortunately for the Düren merchant, he believed this story, sent the certificate back, and received it again two or three days afterwards bearing now the red stamp. He presented this

document at the custom-house at Aix la Chapelle, in order to have the carload entered into Germany; but the custom-house officer had reported first to the American consul at Antwerp, and when he learned that the consul had neither changed the certificate nor been authorized to do so, the entrance into Germany was refused and the buyer placed under accusation of having falsified a public document. After several years, the suit terminated in the supreme court in Leipzig with a sentence of the Düren merchant to eight days' imprisonment for assisting in the falsification of a public document. The Belgian merchant, of course, could not be prosecuted in Germany.

How many times the Belgian port has sent into Germany uninspected meats, it is impossible to say. It is rumored that a regular traffic in empty boxes with proper inspection labels and certificates has existed in Antwerp for some time, with a probability of a like organization in Rotterdam.

JOHN A. BARNES,
Consul.

COLOGNE, *August 3, 1898.*

THE COLONIES AND PROTECTORATES OF FRANCE.

As the colonial question is the subject of widespread study in France to-day, I have made a brief review of the commercial condition of the French colonies, taking my figures from the reports of 1896, as those of 1897 have not yet been given to the public in their entirety. In common with the other great nations of Europe, the statesmen and the business community of France are doing their utmost to augment the importance of their colonies from a business standpoint.

The fifteen colonies that are under French rule contain a superfice of 1,877,991 square miles, and have a population of 51,615,427. Their trade with the home country amounts to $143,806,997; the importations into France therefrom being $73,073,415; exports from France thereto, $70,733,582. The items given herein are condensed from tabulated statements made by Government officials, and covering many pages. I have aimed to give the aggregate trade of each colony, enumerating a few of the principal items of exchange. The recent delimitation of the Niger territory by the Anglo-French Commission, which terminated its labors in June last, will cause some changes in the figures referring to the African colonies, but they will not be forthcoming until some time in 1899. The boundaries fixed by the Anglo-French Commission may be considered as still

uncertain, as the German Colonial Society, on June 28, protested against them as "an infringement of German rights."

The following statistics give the population, area, and annual foreign trade of the colonies and protectorates of France:

African Colonies.

ALGERIA.

The superfice of Algeria is 226,184 square miles; the population numbers 4,429,421.

The productions of this colony consist of cereals, flaxseed, vegetable fiber, iron ore, oranges, essences, red and white wine.

The commerce between France and Algeria for the year 1896 was $82,972,000—$39,372,000 in importations into France, and $43,600,000 in exportations from France. The general commerce with other nations aggregates $20,400,000, of which $8,800,000 represented exportations from and $11,600,000 importations into Algeria.

The largest item of importation into France from Algeria was wine, the aggregate being $19,410,731. The next item is 458,343 head of sheep, valued at $3,107,093.

Among the exportations from France, the values are in the order given: Tissues, passementeries, and cotton ribbons, $6,098,233; metal tools, $1,715,365; furniture and objects in wood, $1,583,812; woolens, $1,384,139; postal parcels, $6,414,199.

Algeria is composed of three departments. The population is as follows: Algiers, called the center, 1,526,667; Constantine, called the east, 1,874,506; Oran, called the west, 1,028,248.

MADAGASCAR AND ITS DEPENDENCIES.

Superfice, 375,000 square miles; population, 6,000,000.

The commercial exchanges between France and Madagascar were $1,200,000—$200,000 in importations into France, and $1,000,000 in exportations from France.

Importations into France: Rubber and raw gutta-percha, $28,974; phormium tenax, abaca, and vegetable fibers, $66,178; rawhides, dry or fresh, $30,180.

Exportations from France: Wines, $244,437; machinery, $91,929; tissues, passementeries, and cotton ribbons, $49,183; tools and other objects in metal, $80,905; cured hides and objects made of leather, $45,245; brushes, buttons, and fancy goods, $41,259.

Mayotte.—Importations into France from Mayotte: Sugar, $148,230; vanilla, $38,656; molasses brandy, $6,092.

Exportations from France to Mayotte: Wines, $6,477; tools and other manufactures of metal, $3,226; clothing, $2,915; machinery, $2,853.

Nossi-bé.—Importations into France from Nossi-bé: Rubber and gutta-percha, $24,884; rawhides, fresh and dry, $12,528; sugar, $9,202.

Exportations from France to Nossi-bé: Tissues, passementeries, and cotton ribbons, $4,072; wines, $10,433; tools and other articles in metals, $2,140.

Ste. Marie de Madagascar.—Importations into France from Ste. Marie de Madagascar: Preserved meats, $668; plants, $222.

Exportations from France to Ste. Marie de Madagascar: Wines, $11,687; musical instruments, $606; brandy and liquors, $2,264; prepared sponges, $1,197.

RÉUNION.

Superfice, 1,600 square miles; population, 169,493.

The commerce with France amounted to $5,600,000—$3,400,000 in importations into France, and $2,200,000 in exportations from France.

Importations into France: Sugar, $2,609,032; vanilla, $325,884; sago, jalep, and exotic fecula, $283,237; molasses brandy, $112,077.

Exportations from France: Tissues, passementeries, and cotton ribbons, $370,723; wines, $432,453; fish, fresh, dried, or otherwise prepared, $154,039; tools and other articles in metal, $65,802; tissues, passementeries, and woolen ribbons, $96,937.

TUNIS.

The superfice of Tunis is 52,903 square miles; population, 1,600,000.

The commerce between France and Tunis for 1896 was valued at $9,600,000—$5,000,000 in importations into France, and $4,600,000 in exportations from France.

The principal items of export from France were: Cereals (grain), $2,131,000; cured hides and objects made of leather, $405,018; clothing and pieces of cloth, sewed, $272,533; metal tools, $224,029; toys, fans, brushes, buttons, and fancy goods, $217,324; tissues, hosiery, passementeries, and woolen ribbons $207,541; the same in cotton, $155,407; machinery and apparatus, $216,167.

The leading items of import into France were: Cereals (flour and grain), $2,456,171; olive oil, $753,360; wine, $537,972; sponges, prepared and raw, $256,039.

WESTERN AFRICA.

Senegal.—Population, 1,800,000.

Commerce with France, $5,700,000—$2,800,000 in importations into France, and $2,900,000 in exportations from France.

Importations into France: Earthnuts (peanuts) in pods, $1,643,436; exotic gums, $892,205; rubber and gutta-percha, $104,575; feathers, $56,457.

Exportations from France: Tissues, passementeries, and cotton ribbons, $1,078,870; wines, $438,617; rice, $332,206; clothing and pieces of cloth, sewed, $163,441; tools and other manufactures of metal, $103,794.

Kongo.—Superfice, 418,750 square miles; population, from 12,000,000 to 15,000,000.

Soudan.—Superfice, 450,000 square miles; population, 300,000.

The commercial exchanges were $3,117,837, viz, $1,781,388 in importations into France, and $1,336,449 in exportations from France.

Importations into France: Palm oil, $696,991; seeds, oleaginous fruits, $567,770; rubber and gutta-percha, $353,536, dyewoods, $107,999.

Exportations from France: Clothing and pieces of cloth, sewed, $218,488; brandy, $43,209; glasses and crystal, $85,310; tools and other things in metal, $96,565; copper, $92,771; wines, $74,213.

Dahomey and dependencies on west coast.—Superfice, 7,500 square miles; population, 22,000.

Importations into France from western coast: Seeds and oil fruits, $351,007; palm oil, $286,791; exotic wood, $33,863.

Exportations from France to the western coast. Wines, $8,510, timber, $7,652; tools and other objects in metal, $3,807.

OTHER PARTS OF AFRICA.

Importations into France: Seeds and oil fruits, $679,472; coffee, $221,840; rubber and gutta-percha, $13,713.

Exportations from France: Arms and powder, $217,458; wines, $73,811; tools and other manufactures of metal, $10,286; cured hides and objects made of leather, $11,195.

AMERICAN COLONIES.

GUADELOUPE.

Superfice, 687 square miles; population, 167,099.

The commercial exchanges between France and Guadeloupe for 1896 were $4,400,000—$2,000,000 in importations into France, and $2,400,000 in exportations from France.

The principal items of importations into France were: Sugar in powder, $2,110,073; coffee, $228,252; dye goods, $248,819; molasses brandy (rum and tafia), $182,620.

Exportations from France: Wines, $379,971; tissues, passementeries, and cotton ribbons, $312,539; prepared leather and objects made of leather, $240,032; fans, brushes, buttons, toys, $179,782;

ready-made clothing and pieces of cloth, sewed, $174,759; tools and other things in metal, $89,214; fish, dried, salted, smoked, or prepared otherwise, $447,365.

MARTINIQUE.

Superfice, 381 square miles; population, 181,599.

The commercial exchanges between France and Martinique in 1896 amounted to $6,200,000, viz: Importations into France, $3,800,000; exportations from France, $2,400,000.

Importations into France: Sugar, $1,925,494; molasses brandy, $1,655,820; cacao and chocolate, $90,592; exotic wood, $62,111.

Among the exportations from France were: Wines, $422,006; tissues, passementeries, and cotton ribbons, $265,612; clothing and pieces of cloth, sewed, $210,361: cured hides and objects made of leather, $191,406; fish, dry, salted, smoked or otherwise prepared, $161,943; toys, fans, brushes, buttons, and fancy goods, $133,495; tools and other articles in metal, $80,343.

FRENCH GUIANA.

Superfice, 5,052 square miles; population, 26,839.

The commerce with France was $2,300,000—$400,000 in importations into France, and $1,900,000 in exportations from France.

The import into France consists of essence of roses.

The exports from France were: Wines, $346,272; prepared leather and objects made of leather, $168,190; tissues, passementeries, and cotton ribbons, $120,028; clothes, $130,131; wheaten flour, spelter, and maslin, $104,567; brushes, buttons, and toys, $106,039; salted meats, $82,466; tools and other manufactures of metal, $55,739.

ST. PIERRE AND MIQUELON.

Superfice, 94 square miles; population, 6,300; double this number during the fishing season.

The exchanges between France and St. Pierre and Miquelon were $7,200,000—$6,000,000 in importations into France, and $1,200,000 in exportations from France.

Importations into France: Fish, dry, salted, or smoked, $5,609,240; cod oil, $296,096.

Exportations from France: Salt, $107,637; wines, $124,561; ropes, $79,959; cider, $77,096; meats, fresh, salted, or preserved, $63,181; clothing and pieces of cloth, sewed, $48,705.

ASIATIC COLONIES.

INDO-CHINA.

Cochin China.—Superfice, 37,375 square miles; population, 2,034,453.

Tonkin.—Superfice, 56,250 square miles; population, 15,000,000.

Kingdom of Anam.—Superfice, 162,500 square miles; population, 6,000,000.

Kingdom of Cambodia.—Superfice, 75,000 square miles; population, 1,500,000.

The commercial exchange between France and Indo-China was $8,200,000—$3,400,000 in importations into France, and $4,800,000 in exportations from France.

Importations into France: Rice, $2,409,847; pepper, $265,428; raw hides, $65,133; exotic resins, $51,485; cocoa or copra almonds, $95,953; waste silk, $70,822; volatile oil or essences, $44,506; albumen, $41,088.

Exportations from France: Tissues, passementeries, and cotton ribbons, $1,291,707; wines, $695,168; tools and other manufactures of metal, $415,853; tissues, passementeries, and woolen ribbons, $168,374; toys, fans, brushes, buttons, and fancy goods, $163,835; cast iron, iron, and steel, $148,588; machinery, $126,894; sugar, $146,754; cured hides and objects made of leather, $115,080.

FRENCH INDIA.

Superfice, 196 square miles; population, 283,053.

The exchanges between France and French India in 1896 were valued at $700,000—$500,000 in importations into France, and $200,000 in exportations from France.

Importations into France: Decorticated earthnuts (peanuts), $392,609; indigo, $31,460; sesame seeds, $10,199; calfskins, $6,345.

Exportations from France: Tissues, passementeries, and cotton ribbons, $32,461; wines, $33,593; tissues, passementeries, and woolen ribbons, $15,850; tools and other articles in metal, $8,848; brandy and liquors, $4,849.

POLYNESIA.

NEW CALEDONIA AND DEPENDENCIES.

Superfice, 8,117 square miles; population, 62,752.

Importations into France: Nickel ore, $1,102,876; cobalt ore, $518,690; preserved meats, $116,988.

Exportations from France: Wines, $473,369; cured hides and objects made of leather, $73,938; clothing and pieces of cloth, sewed, $77,090; tools and other articles in metal, $33,660.

TAHITI.

Superfice, 402 square miles; population, 24,418.

Importations into France, $660,000. Principal articles: Cotton and tissues, $100,000; flour, $52,000; preserves, $40,000.

Exportations from France, $640,000. Principal articles: Copra

and cocoa, $200,000; cotton, $140,000; mother-of-pearl and pearls, $100,000.

RÉSUMÉ.

Colonies and protectorates.	Superfice.	Population.	Imports into France.	Exports from France.
	Sq. miles.			
Algeria	226,184	4,429,421	$39,372,000	$43,600,000
Tunis	52,903	1,600,000	5,000,000	4,600,000
Guadeloupe	687	167,099	2,000,000	2,400,000
French Guiana	5,052	26,839	400,000	1,900,000
Réunion	1,600	169,493	3,400,000	2,200,000
French Indo-China:				
Cochin China	37,375	2,034,453	.....	.....
Tonkin	55,250	15,000,000	.....	.....
Kingdom of Anam	162,500	6,000,000	3,400,000	4,800,000
Kingdom of Cambodia	75,000	1,500,000	.....	.....
Madagascar and dependencies	375,000	6,000,000	200,000	1,000,000
French India	196	283,053	500,000	200,000
Martinique	381	189,599	3,800,000	2,400,000
St. Pierre and Miquelon	94	6,300	6,000,000	1,200,000
Senegal	.....	1,800,000	2,800,000	2,900,000
Kongo	418,750	12,000,000	.....	.....
Soudan	450,000	300,000	1,781,388	1,336,449
Dahomey and dependencies	7,500	22,000	1,861,381	500,003
New Caledonia	8,117	62,752	1,898,646	1,057,130
Tahiti	402	24,418	660,000	640,000
Total	1,887,991	51,615,427	73,073,415	70,733,582

JOHN K. GOWDY,
Consul-General.

PARIS, *July 22, 1898.*

SUBSIDIES OF THE FRENCH LINE OF STEAMERS.

The franchise to establish a line of mail steamers between Havre and New York was originally granted by the French Government to the Compagnie Générale Transatlantique, in 1857. The sum paid annually to the company by the Government was fixed at $1,794,900, of which $579,000 was applied solely to the steamers running to New York, making an average subsidy of $10.77 per nautical mile. The minimum speed exacted by the Government upon granting the franchise was 11½ knots an hour, and the number of trips was fixed at twenty-six per annum.

In 1873, the French authorities increased the amount of the subvention to $703,292, but required forty annual trips, which, it will be seen, reduced the rate to $8.51 per nautical mile. The subsidy was continued on the last-mentioned basis until 1886, when the franchise granted to the company was renewed for fifteen years.

From that time sailings were made weekly, and, as an incentive

to the construction of larger and faster steamers, the Government exacted not only a speed of at least 15 knots per hour, but allowed a bounty of $2.32 per gross ton for every tenth of a knot of speed in excess of the minimum 15 knots. The sum payable to the company in speed bounties, however, was not to exceed $231,600, and this amount has been paid in full ever since the year 1892. The subsidy was also raised to $1,057,640 per annum, or $9.57 per nautical mile. Adding together the amount paid as bounty for speed and that paid for subsidy, the company at the present moment receives $11.66 for every mile steamed.

Though three years remain before the expiration of the concession granted to the Compagnie Générale Transatlantique, the Government has already agreed upon a new franchise, with a view not only of securing a still more rapid mail, passenger, and freight service between France and the United States, but also of keeping pace with the record breakers of the present era. It is true that Government support to Atlantic liners is a serious tax upon the coffers of the Treasury. The question arises, however, as to whether the expenditure is not warranted and fully repaid: first, by the traffic and trade which fast ships are certain to bring, and, second, by the fact that the vessels, being constructed to serve as auxiliary cruisers in time of war, are, to all intents and purposes, Government property.

By the new agreement, the Compagnie Générale Transatlantique is to construct in France three new mail steamers, the first to be completed April 1, 1900; the second, July 1, 1900; and the third, April 1, 1903.

These boats must have a speed, on the trial trip of two hours' duration and under forced draft, of at least 22 knots.

If it is demonstrated by 1905 that the average annual speed of these boats is 10 per cent less than the average speed of foreign competitors, the company agrees to commence the construction of a fourth vessel, to be completed not later than April 1, 1908, on condition that the port of Havre is in the meantime improved so as to accommodate a steamer of at least 623 feet in length. The Government may exact for the fourth vessel every improvement compatible with advanced ocean traffic at that period.

The minimum annual average speed under the new agreement shall be: From April 1, 1900, 17 knots; from July 1, 1900, 17.5 knots; from April 1, 1903, 18.3 knots; from the putting into commission of the fourth steamer, if necessary, 19 knots. When the average annual speed shall exceed the foregoing figures, the company shall be entitled to a bounty on speed. This bounty shall be $4.82 per one-tenth of a knot per gross ton, from the date when the first vessel shall enter into commission. But if the speed agreed upon is not

reached, the same rate can be exacted by the Government for every one-tenth of a knot decrease.

In connection with the subsidy mentioned above, it may be interesting to give a résumé of the report of the operations of the French company during the year 1897, recently received at this consulate.

Notwithstanding the decrease in the receipts of the company, by a judicious cutting down of the expeditures, its officers were able to declare a dividend of 15 francs ($2,89) per share, the par value of the same being 500 francs ($96.50).

ASSETS.

(1) Steamers, real estate, machinery, tools, and furniture of the agencies (first cost diminished by amortization)	$23, 872, 685. 90
(2) Supplies	662, 097. 28
(3) Various bonds	195, 579. 36
(4) Outstanding accounts	1, 280, 197. 76
(5) Cash	3, 262, 753. 74
Total	29, 273, 314. 06

LIABILITIES.

(1) Capital stock, 80,000 shares at 500 francs per share	7, 720, 000. 00
(2) 5 per cent bonds maturing December 31, 1897	2, 702. 00
(3) 3 per cent bonds	18, 231, 448. 59
(4) Capitalization at 6 per cent of twenty-one semiyearly payments, due to the Ancienne Société Valéry	655, 533. 70
(5) Various creditors	$480, 663. 05
(6) Legal reserve and insurance fund	1, 944, 197. 36
(7) Net earnings for 1897	238, 769. 36
Total	29, 273, 314. 06

Total receipts of all kinds for 1897, including the bounties and subsidies received from the Government	8, 879, 538. 00
Total expenses for 1897	7, 647, 784. 00
Excess of receipts	1, 231, 754. 00
Receipts for 1896	9, 366, 980. 00
Receipts for 1897	8, 879, 538. 00
Decrease for 1897	487, 442. 00
Expenses for 1896	8, 007, 553. 00
Expenses for 1897	7, 647, 784. 00
Decrease for 1897	359, 769. 00
Decrease in receipts in 1897	487, 442. 00
Decrease in expenses	359, 769. 00
Decrease of excess of receipts over expenditures as compared with 1896	127, 673. 00

This was owing to the falling off of the receipts from all the lines except those in the coasting trade, which showed an increase over 1896.

From the excess of receipts for the year 1897, amounting to $1,231,754, there were deducted the depreciation in value of the ships and material and the amount put to the credit of the insurance fund, etc., in all $992,985, leaving as net earnings for the year the sum of $238,769.

The receipts of the line between Havre and New York were unfavorably affected by the operations of the Dingley tariff bill, the economic condition of the United States during the first part of the year 1897, and by the keen competition of the different trans-Atlantic companies.

The principal sources of emigration were Switzerland and Italy, although lately the number of third-class passengers coming from Austria, Greece, Turkey, and Armenia by way of Marseilles has increased considerably.

In consequence of the war between the United States and Spain, the itinerary of the Mexican line has been changed. Instead of calling at Habana, the steamers touch at St. Thomas and Kingston, Jamaica, both going and coming. The war has not caused as much of a falling off in the receipts as was expected. While those of the line between Havre and New York were seriously diminished, those of the Mexican line have increased on account of the disorganization of competing lines.

The company has recently established a special department or service for the shipment and reception of small packages to the United States and Canada, which is highly successful.

The following table shows the transportation of passengers, merchandise, specie, and bonds for 1896 and 1897:

Description.	1896.	1897.
Transportation of passengers.....number...	178,882	163,049
Transportation of merchandise.....tons...	765,063	776,286
Transportation of packages.....number...	11,406,551	10,764,884
Transportation of specie and bonds.....value...	$24,980,679	$28,913,757
Transportation of postal packages.....number...	769,920	602,239
Voyages during the year.....do.....	995	1,015
Total amount of coal consumed.....tons...	425,436	404,438

On December 31, 1897, the number of ships composing the fleet of the Compagnie Générale Translantique was sixty-three, of a gross tonnage of 166,797, and developing a horsepower of 169,850. Since that date three vessels have been lost—the *Flachat*, running between Marseilles and Colon, was wrecked February 16, 1898, off the island of Teneriffe; the *Ville du Rome* in going to Algeria was

wrecked March 22, 1898, off Cape Negro on one of the Belearic Islands; and *La Bourgogne* was lost in collision with a British sailing vessel on July 4, 1898, near Sable Island.

The ships of the company have made, in 1897, 681,342 marine leagues, as compared with 658,447 marine leagues in 1896. Upon the line from Havre to New York the average speed was 16.72 knots, and upon the line to the Antilles 13.13 knots per hour.

In order to be prepared for the construction and delivery of the new vessels for the line to New York, the company, during the past year, has made many improvements in its shipyards at Penhoet. The work on these ships has already commenced.

A. M. THACKARA,
Consul.

HAVRE, *July 14, 1898*

ELECTRIC LIGHTS IN BRUSSELS.

On July 22, the first trial of the complete electric installation for illuminating purposes in the Gare du Midi (South Depot) in this city was made, and pronounced thoroughly satisfactory.

La Société Anonyme d'Electricité (Bouckaert & Co.), of Brussels, which performed the work, has received a contract from the Government for similar installation in the South Depot of Ghent.

When the city authorities of Brussels, a few years ago, proposed the question of lighting public places, such as depots, parks, etc., by electricity, and of supplying electricity to subscribers the same as gas, a great cry was raised and protestations made against the innovation, urging that it would ruin the gas works and bankrupt the communal exchequer. Recent statistics show that during the past year not only has the use of electricity increased, but that the profit from the sale of gas is considerably in excess of that of previous years. Deducting the amount expended for establishing plant, etc., the city derived last year a profit of 222,411 francs ($42,925).

The most important installation recently made in this city, is in the King's palace. When the work is finally completed, there will be 7,500 lamps, of which a large number will be of 5 candlepower, employed in the chandeliers illuminating the ball and reception rooms.

There are about 47,391 lamps, reduced in units of 16 candles, in the city system, averaging 117 lamps per 100 running meters of canalized streets. This number includes 770 arc lamps and 28 electric motors, the latter varying from one-tenth to 10 horsepower, with a total of 105 horsepower.

The maximum of the sale of electricity during 1897 was 8,765

amperes, corresponding to about 17,530 lamps of 16 candles functioning simultaneously, or about 37 per cent of the lamps installed.

In view of the increasing use of electricity in this country, there is, in my opinion, an excellent opportunity for the introduction of American electric apparatus of all kinds.

GEO. W. ROOSEVELT,
Consul.

BRUSSELS, *July 25, 1898.*

RUSSIAN PETROLEUM INDUSTRY.

An extraordinary increase of the petroleum-bearing area in Bakou, Russia, during November, 1897, was followed by a normal productiveness in December. The following tables show the quantity of crude petroleum produced per month during the years 1891–1897:

Total production of useful petroleum.

Month.	1891.	1892.	1893.	1894.	1895.	1896.	1897.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
January	352,800	399,600	437,400	405,000	489,600	529,200	689,400
February	406,800	417,600	475,200	403,200	588,600	549,000	664,200
March	394,200	511,200	516,600	428,400	667,800	457,200	595,800
April	363,600	466,200	459,000	471,600	586,800	532,800	622,800
May	435,600	495,000	500,400	612,000	756,000	594,000	604,800
June	421,200	343,800	496,800	450,000	568,800	563,400	640,800
July	403,200	270,000	509,400	405,000	536,400	703,800	604,800
August	432,000	354,600	496,800	426,600	473,400	694,800	576,000
September	421,200	428,400	468,000	406,800	457,200	552,600	599,400
October	460,800	505,800	538,200	450,000	586,800	567,000	626,400
November	414,000	504,000	511,200	406,800	550,800	545,400	770,400
December	437,400	460,800	435,600	489,600	532,800	637,200	606,600
Total	4,942,800	5,157,000	5,844,600	5,355,000	6,795,000	6,926,400	7,601,400

*Production of spring petroleum.**

Month.	1891.	1892.	1893.	1894.	1895.	1896.	1897.
	Tons.	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*	*Tons.*
January	55,800	61,200	108,000	90,000	108,000	118,800	214,200
February	104,400	70,200	151,200	72,000	223,200	153,000	253,800
March	68,400	167,400	185,400	82,800	270,000	36,000	120,600
April	41,400	133,200	122,400	151,200	210,600	102,600	129,600
May	50,400	151,200	162,000	255,600	354,600	127,800	100,800
June	61,200	86,400	194,400	99,000	171,000	149,400	156,600
July	39,600	66,600	192,600	57,600	138,600	250,200	93,600
August	70,200	77,400	176,400	55,800	61,200	214,200	48,600
September	55,806	118,800	160,200	39,600	43,200	75,600	82,800
October	70,200	151,200	201,600	70,200	169,200	91,800	59,400
November	48,600	167,400	208,800	37,800	162,000	82,800	237,600
December	39,600	111,600	100,800	100,800	131,400	154,800	99,000
Total	705,600	1,362,600	1,963,800	1,112,400	2,043,000	1,557,000	1,596,600

*Included in figures giving totals.

There was a slight decrease of the production during December, notwithstanding there were two more wells in operation than in November.

The quantity of reserve on hand increased in December. The total quantity not sold on January 1, 1898, amounted to 1,591,200 tons; on December 1, 1897, there were 1,296,000 tons. The stock at the wells diminished from 185,400 tons to 88,200 tons.

The following table shows the factory supply:

Description.	Dec. 1, 1897.	Jan. 1, 1898.
	Tons.	*Tons.*
Raw petroleum	234,790	276,032
Lighting oils	179,992	242,190
Lubricating oils	27,810	34,499
Petroleum residues	669,807	948,716
Total	1,112,399	1,501,437

Although the supplies increased, the prices did not fall; the average price in December was higher, as compared with the preceding months of the same year. The following table shows the average price (per 36 pounds) of raw material during the last seven years:

Month.	1891.	1892.	1893.	1894.	1895.	1896.	1897.
	Cents.	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*	*Cents.*
January	2	0.7	1.2	1.1	2.3	3.5	4 to 3.9
February	2	0.7	1.1	1	2.4	3.5 to 3.9	3.9 to 4
March	1.8	0.6	0.9	1.1	2.2	3.5 to 3.9	4
April	1.8	0.5	0.6	1.4	2.6	3.6 to 4	.....
May	1.5	0.4	0.3	1.3	3.5	3.9 to 4.4	3.7 to 4
June	1.4	0.4	0.3	1.1	3.7	4.1	3.7 to 3.6
July	1.3	0.5	0.3	1.6	3.6	4.1 to 4.4	3.7
August	1.1	0.6	0.5	1.9	4.1	3.6 to 3.9	3.7 to 4
September	1	0.6	0.8	1.9	4.6	3.7 to 3.9	3.9 to 4
October	0.8	0.6	0.8	2	4.1	3.9 to 4.1	3.9 to 4
November	0.8	0.6	0.9	2.1	3.3	4.2 to 4.4	3.9 to 4
December	0.8	0.8	0.9	2.3	3.6	4 to 4.1	4.2 to 4

The prices of the residues continued higher during December—averaging 4.5 cents per 36 pounds. The prices of kerosene were also high; fluctuating in Batum and Petrovsk between 7 and 8 cents per 36 pounds. The export of petroleum products from Baku during December was small. The total export amounted to 142,200 tons, the greater part of which—viz, 99,000 tons—consisted of lighting oils. The export from Batum during December amounted to 88,000 tons. Whilst in the immediate localities of production prices rose, in the Volga region and in central, southern, and western Russia they declined. The undecided condition of the business with petroleum

residues during November caused a standstill in December. No bargains were made; the prices, with few exceptions, were nominal (Tsaritsine, 8.8 to 8.2 cents, and Nizhni Novgorod, 11.8 to 11.3 cents per 36 pounds).

It was expected that the prices of kerosene would rise during December, but at the beginning of the month the condition of the Volga markets began to weaken and the prices fell approximately about 1 to 2 cents per 36 pounds. The same was observed also at the markets at Odessa, Kiev, Warsaw, etc.

W. R. HOLLOWAY,
Consul-General.

ST. PETERSBURG, *July 20, 1898.*

UTILIZATION OF INDIAN-CORN STALKS IN RUSSIA.

On the 19th of July, a most interesting experiment was made by the Russian Admiralty at the naval proving grounds at Poligon, near St. Petersburg.

A coffer dam 6 feet long, 6 feet deep, and 3 feet broad was packed with blocks of cellulose made from the pith of indian-corn stalks. The material was supplied by the Marsden Company, of Philadelphia, and the dam was packed under the supervision of the experts of that company. The cellulose within the dam was compressed until it weighed 8 pounds for each cubic foot. A 6-inch solid shot was fired through the dam, striking it a distance of about 20 inches from the bottom. The shot struck the dam at a velocity of 1,000 feet a second and passed clear through both the iron walls and the cellulose packing. Less than half a pound of the cellulose was carried out by the projectile. The water compartment of the dam was filled, giving a pressure of nearly 5 feet of water on the perforated surface. In just half an hour a moist spot began to show on the outer surface of the dam, but it was evident that the moisture had come along the bottom of the packing and not through the path of the shot. In four hours no water had come through the shot's path, and only 6 gallons had passed under the packing. The experiment conclusively demonstrated that a ship provided with a coffer dam packed as was the one used in the experiment could be perforated 5 feet below the water line without the least danger of the entrance of water. This demonstration opens up an immense market for indian-corn pith, and will prove of great advantage to American agriculture.

Among those who were present at the trial were Admiral Decker, director, and Colonel Ricosanin, deputy director, of the naval proving grounds at Poligon; Col. Nicolas Zitoff, member of the naval

construction board of the Russian navy; Mr. Henry C. Watts, representative of the Marsden Company; Mr. Irving Scott, president of the Union Iron Works, of San Francisco; Dr. H. W. Wiley, representative of the Department of Agriculture, Washington, D. C.; and many others.

After extracting the cellulose for packing coffer dams and other purposes, the outer envelope of the stalk is ground into an excellent cattle food. This property of the maize stalk is of the greatest importance. It is evident that this waste product of the vast maize fields of America is destined to interest European nations and find eventually a wide market.

Similar trials of maize pith as an obturating material for battle ships have been made in England with favorable results.

W. R. HOLLOWAY,
Consul-General.

ST. PETERSBURG, *July 25, 1898.*

CARTAGE IN LONDON.

At the request of a resident of New Jersey, an instruction was sent to the consul-general at London, June 22, 1898, asking that information in regard to central control over public cartage in that city be supplied the Department. Mr. Osborne sends the following in reply, under date of July 21, 1898:*

After investigation, I find that there is no central control of public cartage. Many years ago there was such control over carts and carmen; but since the introduction of railroads, the latter do most of the public cartage in London. There are two or three large companies, such as Pickford & Co. and Carter Paterson & Co., who independently carry on considerable business and who have a large number of vans of every description scattered over the city.

There is another class of carmen, styled "bonded carmen," who hold a license from the board of customs. The right of ordering and disposing of these carts, cars, and carmen, and all persons working the same within the city, rests with the corporation. The carts are subject to an annual license, and the number licensed last year was one hundred and thirty-six. These and other carts and wagons are widely used throughout the city by warehousemen and others, for the conveyance of goods and other merchandise.

In the city of London, under the authority of various acts of Parliament, the commissioner of the city police has controlling powers for regulating the traffic, and the same applies to cabs and

* Advance Sheets of report have been sent to inquirer.

omnibuses, which are all licensed at Scotland Yard by the commissioner of metropolitan police. In the judgment of the corporation officials, existing arrangements are satisfactory; and the latter have been greatly assisted by recent post-office legislation, which has afforded increased facilities for the distribution of small parcels.

BRITISH STEEL TUBES FOR THE UNITED STATES.

A couple of days ago I received from a firm of merchants in the United States a request for the names of British manufacturers who make seamless steel tubes of 8 and 12 inch bore, walls of one-fourth inch thickness, with 4-inch flange, and the inside of gun-barrel smoothness. These tubes are evidently intended for use in shipbuilding.

In response to letters sent to several manufacturers, I have had calls from their representatives and have given them the address of the American firm making the request. From some of these people I learn that they have received inquiries direct from other American firms for tubes of 4, 6, and 8 inch bore, but the inquiry I have is the only one for 12 inch, and they are surprised that there should be an intention to have the tubes and flange in one piece of metal, as Government requirements here and on the Continent demand that the flange be attached separately by rivets.

The several inquiries for large tubes give the matter importance, and it would be interesting to know whether tubes of the kind described are manufactured in the United States or not; whether the inquiries mean only a question of price; or whether we are really dependent upon Great Britain for tubes for shipbuilding.

I send this report because if there are American manufacturers of large tubes, they are, I believe, entitled to the information I have about possible purchases here.

The manufacturers of bicycle and other small seamless tubes here are in a mild state of excitement, owing to advices they have received from the United States that there is a prospect of the formation of a trade trust with a general increase of price, and they anticipate that this may admit English tubes again to the American market.

MARSHAL HALSTEAD,

BIRMINGHAM, *August 8, 1898.* *Consul.*

MACHINERY PRIZE COMPETITION IN ITALY.

The Department is in receipt of a note from the Italian embassy, dated August 13, 1898, requesting that publicity be given to the accompanying royal decrees inviting international competition in steam agricultural machinery, and also in machines used for the distillation of wine. The decrees are summarized as follows:

STEAM AGRICULTURAL MACHINERY.

ARTICLE 1. The international concourse of steam plowing engines and machines shall be opened at Turin on the 15th of September, 1898, and closed not later than the 15th of October.

ART. 2. Inventors and constructors, both native and foreign, are admitted.

ART. 3. Agents of engines made in Italy or abroad are held to be actual representatives of the respective constructors, and are entitled to obtain the prize.

ART. 4. An executive committee, resident in Turin, will attend to whatever is required in order that this concourse may be successful.

The said committee is composed of two ministerial deputies from the Royal Office of Agriculture and of the presidents of the executive committee in the National Exhibition and of the Agricultural Academy, as well as of the president of the agricultural committee in Turin.

ART. 5. The prizes granted by the Royal Office of Agriculture are: One gold medal and two silver medals.

ART. 6. A special committee composes the jury and is the only awarder of the prize medals.

ART. 7. Exhibitors are charged with transportation expenses (both to and from the exhibition) of their own engines and machines, as well as with the expenses of transportation to the locality where the trials are to take place.

ART. 8. Requests for admission are to be forwarded to the executive committee not later than the 30th of July, 1898.

Each request will be accompanied by an explanation that will enable the machines to be understood. The following points must be stated:

(*a*) The number and class of plows, harrows, cultivators, etc., with which the steam motor is to be used.

(*b*) The quality and quantity of fuel required in order to put under tillage 1 hectare of land.

ART. 9. The executive committee, as soon as it receives requests from the candidates, shall notify each of his admission, and shall send any further information required.

ART. 10. The executive committee is not liable for any damage or detriment which may happen while transferring the engines or during the experiments.

ART. 11. Each engine or apparatus ought to be submitted to such experiments as the jury may deem fitting for the purpose, and such experiments shall take place on lands of various sorts.

ART. 12. Each engine and each machine must be managed by its constructor or his legal representative, who is obliged to give whatever explanation he may be asked for by the jury. In case the constructor or his representative is not present, no trial of his machinery can be made.

ART. 13. Every competitor shall supply his own machinist and fireman, as well as his own workmen skilled in plow driving.

ART. 14. The jury shall have full powers in the management of the trials and will establish rules in conferring the prizes; and within three months from the closing of the competition will report to the Royal Office of Agriculture.

MACHINES FOR DISTILLATION OF WINE.

Machines for the distillation of grounds and dregs of pressed grapes and wine must conform to the following conditions:

(*a*) They must be easily carried through the fields and managed within cottages of limited proportions.

(*b*) They must be simple of structure, so as to be readily worked and managed by workmen taken from the peasant class.

Applications accompanied by descriptions, such as the exhibitors shall judge necessary to an understanding of the apparatus, must state the space occupied by the machine in length, breadth, and height, as well as the quantity and quality of the fuel employed.

Machines which have already received prizes will be admitted, but can not obtain a new prize unless they offer some capital modifications, and provided the new prize be of a superior degree to those previously obtained.

Machines must be sent to Turin and exhibited not later than the 15th of September, 1898.

The other provisions of the decree are similar to those given for steam agricultural machinery.

THE COMMERCIAL-TRAVELER TAX IN SWITZERLAND.

For a number of years, there has been a tax levied on commercial travelers who visit Switzerland. Previous to 1892, the different Cantons had different regulations regarding this tax, but in that year a federal law was enacted, by which the department of justice of any Canton may issue a permit to a commercial traveler, this permit costing 150 francs ($28.90) per year, or 100 francs ($19.30) for six months.

Although the population of the whole of Switzerland is scarcely 4,000,000, the various Cantons have realized quite an amount from this tax, which is divided among them pro rata at the end of the fiscal year.

The amount of fees received since the law went into effect is as follows:

Year.	Amount.	
	Francs.	
1893	310,650	$59,955.45
1894	209,200	40,375.60
1895	221,700	42,788.10
1896	234,350	45,229.55
1897	237,850	45,905.05
1898 (first six months)	268,200	51,762.60

It will be seen that the amount received during the first half of the present year is greater than that received during any other full year, excepting 1893, which was the first year of the Swiss tariff.

There are several exceptions to the general law that should be noted:

(1) Commercial travelers selling cognac, rum, arrack, whisky, absinthe, vermuth, bitters, or any intoxicating liquors to the legitimate trade in quantities of not less than 40 liters (10.56 gallons) are exempt.

(2) Commercial travelers selling to the legitimate trade, to stores, or to mechanics who utilize the articles purchased are also exempt.

Travelers of the above classes are furnished with a permit which is of a green color.

(3) Travelers, or rather agents corresponding to those who visit private houses selling sewing machines, etc., in the United States, taking orders for the delivery of goods have to pay 150 francs ($28.90) a year, and receive a permit of a red color.

Commercial travelers of the green-card variety who trespass on the privileges of those of the red-card class make themselves liable to a heavy fine. The fact that a man can sell liquors at wholesale and pay no tax, while an ordinary house agent must pay one, seems rather incongruous to our American ideas. In these classes, Swiss and foreigners are treated alike. Ordinary peddling, as we understand it, is prohibited.

The following table, covering the last three years, shows the number of commercial travelers and the countries from which they come:

Country.	1897.	1896.	1895.
Switzerland	16,743	15,171	14,562
Germany	3,257	2,952	3,246
France	1,152	1,051	794
Italy	282	235	209
Austria	163	129	151
England	52	50	58
Belgium	46	42	65
Spain	19	18	11
Holland	11	14	16
Other countries	2	1	3
Total	21,727	19,663	19,115

It will be noted that of the whole number not one is credited to the United States. In view of the fact that many circulars, catalogues, etc., of goods have been received at this office, with the request that they be "advantageously distributed," I would repeat what has been written by many of my colleagues throughout Europe: it is absolutely of no avail to send circulars or catalogues in

the English language to business houses in Switzerland. If circulars must be sent, they should be in German or French. Printers' ink may be of service in some few cases; but a live representative who could speak the language would be of inestimable benefit to houses desiring to open trade with Switzerland. The mode of doing business here is very conservative, and Swiss houses will not accept goods C. O. D.; therefore, credit for a reasonable time should be allowed.

The Canton of Berne is suffering for modern labor-saving machines and novelties, and a sample room in Berne where goods could be exhibited would, I think, prove of the greatest benefit.

ADOLPH L. FRANKENTHAL,
BERNE, *July 23, 1898.* *Consul.*

CHEAP RAILWAY RATES IN SWITZERLAND.

I inclose herewith an extract from the Paris edition of the New York Herald of June 28 relative to the cheap rate of travel in Switzerland that may prove of interest to tourists.

It may be well to emphasize the fact that no luggage is carried free.

ADOLPH L. FRANKENTHAL,
BERNE, *June 29, 1898.* *Consul.*

Railway traveling in Switzerland has, since June 1, undergone quite a revolution in the delivery of tickets and their extraordinary cheapness. A great blow has been given by the railway administration to the formerly advantageous tourist or circular ticket.

The following is the series of tickets delivered at all the most important stations at a couple of hours' notice and at all small stations at twenty-four hours' notice:

Tickets for one person, valid for—	First class.		Second class.		Third class	
	Francs.		*Francs.*		*Francs.*	
15 days	60	$11.58	42	$8.11	30	$5.79
30 days	100	19.30	70	13.51	50	9.65
3 months	240	46.32	170	32.81	120	23.16
6 months	380	73.34	270	52.11	190	36.67
12 months	600	115.80	420	81.06	300	57.90

For two persons of the same household the price of the ticket valid for twelve months is: First class, 800 francs ($154.40); second class, 560 francs ($108.08); third class, 400 francs ($77.20).

These new tickets enable the holder to travel as much and as long as he likes over the entire railway system of Switzerland during the time of the validity of his ticket. The lake steamers are also available, a second-class railway ticket giving the right to a first-class ticket on the steamers. These tickets are rigorously per-

sonal, and have attached to them a photograph of the holder. Tickets must be signed with the holder's entire name. An extra sum of 5 francs (97 cents) has to be paid upon delivery, which, however, is returned when the ticket expires. The duration of these tickets can not be prolonged. No luggage is allowed free, and no allowance is made for tickets unused.

Cyclists will also be glad to learn that on the Franco-Swiss frontier all vexatious questions and demands about introducing bicycles have now been done away with, for all members of the French Touring Club. Such bicycles can be brought in free of charge. No more "permits" or charge for entrance are made. They are simply treated as ordinary luggage.

INDUSTRIES IN BRESLAU.

The manufacturing industry in this district has largely increased within the last six or eight years, on account of the low wages paid to all classes of mechanics and laborers; the rates being less in Silesia, Posen, and a part of Austria bordering on Silesia, than anywhere else in Germany.

The main articles manufactured in this district are as follows: Linen, cotton, silk, silk-mixed goods, woolen cloth, shawls and hoods, laces and lace curtains, artificial flowers, gloves of leather and wool, porcelain, glass, arsenic, brushes, chemicals, chromos, buttons, liquors, toys, sugar, zinc dust, iron goods, machinery, earthenware, hats and caps of wool or straw.

The export from this district has been and is very heavy, amounting to $1,180,992 to $2,271,407 per annum.

The output of these different manufactories is nearly all exported to America. If it were not for the American trade, manufactories could not exist in this district.

The tariff has not affected the industries of this district as much as might appear from figures. The quantity of exports has not diminished to any great extent. Prices, indeed, have been reduced, but the manufacturer himself has not been the sole loser; a proportionate deduction from the wages of the mechanics and laborers has been made. A whole family—man, wife, and children—work in a factory for about 25 cents a day. I will furnish in my next report statistics of the wages paid in the different factories of my consular district.

Sugar, however, is affected by the new tariff. The amount exported from this district during the year ending June 30, 1897, was valued at $298,909. This sum added to the total value of exports during the year ended June 30, 1898, will make $1,479,901, which is more than the general average of the export from this district.

C. W. ERDMAN,

BRESLAU, *July 16, 1898.* *Consul.*

WAGES IN BRESLAU.

I submit a tabular statement of the salaries and wages paid in this consular district to the different employees and workmen, as follows:

Industry.	Wages per week.		Industry.	Wages per week.	
Breweries:			**Porcelain factories:**		
First brewer	$7.14 to	$9.52	Burners	$1.42 to	$4.76
Second brewer	4.76 to	7.14	Furnace tenders	1.42 to	4.76
Barrel washer		2.85	Model makers	1.42 to	4.76
Bottlers	2.14 to	2.85	Painters	1.42 to	4.76
Glass manufactories:			Staff turners	1.42 to	4.76
Blowers	5.95 to	8.56	Sorters and packers	1.19 to	2.14
Cutters	4.28 to	5.71	Binding girls	1.19 to	2.14
Engravers and painters	4.28 to	5.71	**Printing establishments:**		
Smelters	2.85 to	4.28	Editor	9.04 to	22.84
Heaters and burners		2.85	Lithographers	3.57 to	14.28
Sorters and packers		2.85	Reporters	4.76 to	8.33
Binding girls		1.42	Printers	6.22 to	7.14
Glove manufactories:			Typesetters	4.76 to	5.95
Cutters	2.85 to	5.71	Bookbinders—		
Sorters	1.19 to	1.90	Men	2.81 to	5.71
Sewing girls	1.19 to	1.90	Girls	1.19 to	2.38
Hat manufactories:			Pasteboard makers—		
Milliner girls	2.38 to	9.52	Male	3.57 to	4.28
Felt pressers	4.76 to	7.14	Female	1.19 to	2.38
Straw pressers	3.57 to	5.95	Cutters	2.38 to	2.81
Sewing girls	1.42 to	2.85	**Silk and silk-mixed manufactories:**		
Linen factories:			Dyers	2.81 to	4.76
Dyers	2.85 to	4.76	Weavers	1.90 to	3.33
Embroidery girls	.71 to	4.28	**Woolen goods manufactories:**		
Bleachers	2.85 to	4.80	Weavers	2.14 to	3.57
Weavers	1.42 to	4.80	Embroidery girls	1.90 to	2.85
Machinery and iron goods manufactories:			Girls	1.19 to	2.14
Engineers	7.14 to	17.85	**Railroad officials:**		
Turners	5.95 to	9.52	Engineers	8.33 to	11.90
Molders	4.76 to	9.52	Switchmen	3.57 to	8.09
Electricians	4.28 to	9.52	Conductors	3.57 to	8.09
Blacksmiths and horseshoers	4.28 to	7.14	Firemen	5.47 to	7.61
Pattern makers	4.28 to	7.14	Brakemen	3.57 to	5.47
Locksmiths	3.57 to	7.14	**Post officials:**		
Machinists	4.76 to	5.95	Post clerks	10.23 to	13.80
Smelters	3.57 to	5.95	Letter carriers—		
Boiler makers	2.85 to	5.95	In the city	4.28 to	7.14
Smith	2.85 to	4.76	In the country	3.33 to	4.28
Merchant tailors:			Mail carriers	2.38 to	2.81
Cutters	5.71 to	22.84	**Police officials:**		
Tailors	2.38 to	5.95	Police inspectors	10.23 to	13.80
Mills:			Policemen	4.52 to	7.14
First miller		9.52	**Fire department:**		
Second miller	4.28 to	5.95	Inspectors	10.23 to	11.90
Mill hands	5.23 to	5.95	Sergeants	5.47 to	8.09
Sharpeners	3.57 to	4.76	Firemen	4 76 to	5.95

Industry.	Wages per week.	Industry.	Wages per week.
Other workmen:		Other workmen—Continued.	
Bookkeepers	$5.95 to $15.85	Cork cutters—	
Engravers	5.95 to 9.52	Men	$3.57 to $5.95
Street pavers, asphalt	6.18 to 9.52	Women	2.14 to 3.33
Store clerks	3.57 to 8.33	Harness and trunk makers	3.57 to 5.95
Watchmakers	4.76 to 7.14	Street pavers, stone	4.28 to 5.71
Street-car conductors—		Cabinetmakers	4.28 to 5.71
Horse car	3.84 to 7.14	Street-car drivers—	
Electric	3.80 to 7.14	Electric	3.80 to 5.47
Painters	2.85 to 7.14	Horse car	3.80 to 4.76
Bricklayers	5.71 to 6.18	Bakers	4.28 to 5.23
Carpenters	5.71 to 6.18	Shoemakers	2.85 to 4.76
Barbers	4.76 to 5.95	Brush makers	3.57 to 4.28
Cigar makers—		Street cleaners	3.33 to 4.28
Men	3.57 to 5.95	Laborers	2.85 to 3.57
Women	2.38 to 4.28		

C. W. ERDMAN,
Consul.

BRESLAU, *July 23, 1898.*

GERMAN EXPORTS TO THE UNITED STATES.

Statement of the declared values of exports to the United States from the district of the consulate-general at Frankfort and the consulates under its supervision during the quarter ended June 30, 1898, and the corresponding quarter of the preceding year.

Consulate.	June quarter—		Increase.	Decrease.
	1897.	1898.		
Frankfort	$1,447,969.29	$1,519,493.98	$71,524.69	
Aix la Chapelle	609,564.71	203,705.21		$405,859.50
Bamberg	140,682.89	92,377.38		48,305.51
Barmen	2,115,883.86	1,342,452.40		773,381.46
Cologne	651,559.92	419,031.56		232,528.36
Crefeld	1,151,701.10	472,929.25		678,771.85
Düsseldorf	369,248.82	153,900.51		215,348.31
Freiburg	310,679.65	141,291.35		169,388.30
Fürth	641,812.66	419,033.74		222,778.82
Kehl	304,190.19	213,551.59		90,638.60
Mannheim	919,949.51	837,244.53		82,704.78
Mainz	526,097.40	577,978.52	51,881.12	
Munich	202,102.14	83,721.99		118,380.15
Nuremberg	344,985.95	271,879.23		73,106.72
Sonneberg	1,197,344.18	746,413.24		450,930.94
Stuttgart	335,262.91	185,008.08		150,254.83
Weimar	316,391.33	211,320.34		105,070.99
Total	11,585,426.51	7,891,332.90		3,694,093.61

Declared values of exports to the United States from the district of the consulate-general at Frankfort and the several consulates under its supervision during the fiscal years ended June 30, 1897 and 1898, respectively.

Consulate.	Fiscal year—		Increase.	Decrease.
	1896–97.	1897–98.		
Frankfort	$4,747,979.33	$5,262,035.16	$514,060.83	
Aix la Chapelle	1,901,319.23	918,846.50		$982,472.73
Bamberg	567,420.15	429,715.09		137,705.06
Barmen	6,428,456.77	5,464,486.31		963,970.46
Cologne	2,164,045.59	1,727,200.31		436,845.28
Crefeld	3,198,461.65	1,863,429.93		1,335,031.72
Düsseldorf	995,373.60	782,868.84		212,504.76
Freiburg	1,445,922.74	1,099,881.65		346.041.09
Fürth	1,946,251.29	1,430,276.81		515,974.48
Kehl	955,533.42	1,031,967.05	76,433.63	
Mannheim	3,468,261.72	3,311,415.79		156,845.93
Mainz	2,019,961.00	2,020,888.55	927.55	
Munich	859,267.50	540,958.97		318,308.53
Nuremberg	1,561,521.75	1,490,371.25		70,150.50
Sonneberg	3,311,595.70	2,234,206.43		1,077,389.27
Stuttgart	1,168,577.96	739,396.22		429,181.74
Weimar	883,933.67	677,556.65		206,277.02
Total	37,623,883.07	31,025,501.51		6,598,381.56

The exports for the last five fiscal years have been:

1893–94	$25, 089, 166. 00
1894–95	33, 058, 196. 14
1895–96	38, 193, 414. 34
1896–97	37, 623, 883. 07
1897–98	31, 025, 501. 51

FRANK H. MASON,
Consul-General.

FRANKFORT, *July 6, 1898.*

EXPORTS OF GERMAN ANILINE COLORS.

The German chemical industry has largely increased its trans-Atlantic exportations during the last few years. In 1889, German chemicals sent abroad were valued at $53,800,000. In 1896, they were worth $77,150,000, an increase of nearly $24,000,000, or more than 43 per cent, within seven years.

One-third of the total increase is due to the heavy exportation of German aniline colors. They rose from $9,140,000 in 1889 to $15,947,000 in 1897, the imports remaining stationary at about $905,000. This result is all the more remarkable because it was achieved, as in almost every other case, in spite of lower prices; for in 1889, the weight of the aniline colors exported amounted only to 6,975 tons, while in 1897 it reached 17,639 tons. The quantity exported in

1897 was therefore two and one-half times that of 1889, while the value was far from being doubled. German aniline colors have, indeed, conquered the whole world; they are to be found in every country of the globe.

The heaviest consumer is America. The United States imported last year 39,008 double centners* of aniline colors; Great Britain's imports rose to 35,750 double centners; Austria-Hungary bought 16,595 double centners; China, 13,855 double centners; Japan, 5,077 double centners; Belgium, 8,284 double centners; British East Indies, 8,066 double centners; and Italy, 9,823 double centners. France, Denmark, Holland, Russia, Sweden, and Switzerland are also good customers for German aniline colors, and Greece, Norway, Portugal, Roumania, Spain, Turkey, Brazil, Canada, Mexico, and British Australia buy their aniline colors in the German market. That the consumption of this article is largely increasing in Germany itself, is shown by the falling off in the consumption of indigo, which is imported from abroad.

LOUIS STERN,
Commercial Agent.

BAMBERG, *July 8, 1898.*

THE LUMBER TRADE OF BELGIUM.

According to the latest available statistics, the extent of the forests and woods of Belgium in 1880 amounted, approximately, to 1,223,568.58 acres, or 16.61 per cent of the total area of the country. Of the forest lands, 774,084.77 acres belong to private individuals and the remainder to the State, to municipalities, or to public institutions. The annual returns from the sale of lumber average $4,169,000.

THE IMPORT TRADE.

The production of lumber in Belgium is totally inadequate for the needs of the country; consequently, the imports are heavy. The figures of lumber imported during the past few years are:

Year.	Building lumber.	Other lumber.	Total.
1893	$13,064,749	$1,494,499	$14,559,248
1894	13,238,642	1,853,186	15,091,828
1895	12,817,323	1,919,771	14,737,094
1896	12,137,770	†5,194,981	17,332,751
1897	13,406,008	‡6,906,528	20,312,636

*The double centner, or double German hundredweight, is equivalent to 100 kilograms, or 220.46 pounds.

†Including oak and walnut to the value of $3,046,891.

‡Including oak and walnut to the value of $3,941,545.

Building lumber is one of the most important articles in the Belgian import trade. Sweden and Norway supply the greater part of lumber imported, closely followed by Russia, Germany, France, and the United States. The valuations of imports from the countries named, during the past five years, have been as follows:

Country.	Building lumber of all kinds (all oak and walnut included).				
	1893.	1894.	1895.	1896.	1897.
Sweden and Norway	$6,599,407	$6,223,864	$5,988,790	$7,334,386	$7,877,433
Russia	3,665,807	2,854,084	3,088,779	3,459,946	4,062,574
Germany	1,303,715	1,379,564	1,538,807	1,731,789	1,819,283
France	877,957	649,094	568,192	568,192	792,073
United States	*139,268	*487,711	*616,828	1,220,918	1,629,191

Country.	Miscellaneous lumber (exclusive of all oak and walnut).				
	1893.	1894.	1895.	1896.	1897.
Sweden and Norway	$98,237	$26,025	$130,275	$87,815	$75,035
Russia	185,280	274,060	275,797	394,249	785,169
Germany	220,985	261,129	316,327	299,922	270,224
France	426,723	567,806	515,949	711,784	638,770
United States	†156,137	†224,924	†231,307	33,775	22,609

Country.	Manufactured lumber.				
	1893.	1894.	1895.	1896.	1897.
Sweden and Norway	$4,246	$4,439	$3,281	$4,246	$2,895
Russia	.....	.....	.....	.....	2,613
Germany	43,039	51,724	56,356	64,462	55,445
France	163,085	180,262	134,413	103,448	82,030
United States	.....	.....	.....	.....	12,239

* Exclusive of oak and walnut. † Including all oak and walnut.

Total imports of lumber.

Country.	1893.	1894.	1895.	1896.	1897.
Sweden and Norway	$6,701,890	$6,254,328	$6,122,346	$7,426,444	$7,426,447
Russia	3,851,087	3,128,144	3,364,576	3,854,195	4,850,356
Germany	1,627,739	1,692,417	1,911,490	2,096,173	2,144,952
United States	295,405	712,635	848,135	1,254,693	1,664,039
France	1,467,765	1,379,981	1,218,554	1,383,424	1,513,873

It is gratifying to observe that the trade of the United States is constantly increasing. Almost all lumber brought to Belgium arrives either at the port of Antwerp or of Ghent.

The following table shows the total quantity of building lumber imported and the amount received at Antwerp:

Year.	Oak and walnut.		Other building lumber.	
	Total arrived.	Arrived at Antwerp.	Total arrived.	Arrived at Antwerp.
	Cubic feet.	*Cubic feet.*	*Cubic feet.*	*Cubic feet.*
1894	3,104,490	1,434,009	24,399,386	14,674,871
1895	3,124,193	1,170,221	23,357,951	13,749,819
1896	3,290,185	1,313,708	28,746,683	16,238,362

The amounts of lumber imported at Ghent via the Terneuzen Canal were:

Description.	1895.	1896.	1897.
	Tons.	*Tons.*	*Tons.*
Oak logs	8,441	8,099	9,017
Miscellaneous oak lumber	2,296	541	1,404
Pitch pine:			
Beams	509	671	250
Joists and planks	3,881	1,627	2,246
Pine:			
Beams	9,637	10,111	8,786
Joists and planks	89,874	107,175	124,392
Other lumber	58,033	59,890	67,951
Miscellaneous manufactures of wood	44	45	54
Total	134,715	198,159	214,100

The growth of the trade in Ghent is shown by the number of vessels exclusively loaded with lumber arriving in recent years. In 1895, there were 139 of a total tonnage of 76,511; in 1896, there were 148 vessels of 91,584 tons; in 1897, there were 198 vessels of 124,289 tons. Among all these arrivals, however, only some three or four ships of small tonnage annually reach here with lumber cargoes from the United States. This fact merits the attention of American lumber exporters. With such a lumber market as exists at Ghent, and with so many arrivals from foreign countries via the Terneuzen Canal, it seems strange that American lumber does not figure to a larger extent in the imports. Ghent is conveniently situated as a port and railway center, not only for the western and southern portion of Belgium, but also for northern and eastern France. The harbor dues and wharfage charges, as well as warehouse costs, are considerably less than at Antwerp.

OPINIONS OF LUMBER IMPORTERS.

In view of the large importation of lumber and the favorable conditions existing on this market, I have undertaken to determine

the nature of the demand; for what uses lumber is mostly required; what kinds of lumber are wanted; what consideration is given to American lumber, and how, in the opinion of local dealers and consumers, our trade might be increased. With these objects in view, a circular letter was recently addressed to the lumber importers of this city. From the replies, I learn that American lumber would, if properly presented, receive great attention on this market. Almost all my correspondents believe that our trade in lumber might be increased. I quote three of these letters.

The Société Anonyme Luy, a very important lumber-importing house, writes as follows:

We import from America white cottonwood, sawn in different thicknesses, and unsawn mahogany and walnut blocks, all for cabinetmaking and house finishing. The whitewoods and walnut come from New Orleans; the mahogany from Cuba. For want of direct steamers to Ghent, this lumber is imported by way of Antwerp. The annual sales of such wood here may be valued at $10,000—prices depending upon quality and dimensions. If this lumber came directly to Ghent by steamer, it is certain that sales would be more important, as the cost of delivery would be much less, freight from Antwerp to Ghent and cost of transshipment being saved.

Another important firm, Messrs. Mathuys & De Vriend, replies:

We import from the United States sawn pitch-pine beams. This lumber is used for general building purposes, for the manufacture of railway and tramway cars, for mining purposes, and for maritime construction. Sawn lumber forms the larger portion (about 90 per cent) of the imports. We estimate the annual value of pitch pine imported at Ghent at about $130,000. The greater portion of the lumber imported here comes from Sweden, Norway, and Russia. The red and white pine, or fir, is employed for building purposes, for carpentry work, and for manufacture of boxes. All lumber arrives at Ghent via Terneuzen Canal. The American lumber which we import comes from the ports of Pensacola, Pascagoula, and Mobile. The lumber market at Ghent is the most important in Belgium, after Antwerp; the annual sales amount to $1,800,000. It is impossible to give prices; there are one hundred different varieties and qualities on this market, with prices more or less variable. We do not believe it possible to increase the trade in American lumber at Ghent. The woods used consist of special species and are employed only for certain purposes. Furthermore, they are too high priced to compete with the inferior qualities of Sweden, Norway, and Russia. Please note that all which precedes relates to the importation of lumber for building purposes.

The most important letter received from a lumber merchant is that written by Mr. V. Collumbien, of this city, by reason of the details given and the opinions expressed. Mr. Collumbien says:

Of a total value of from $2,400,000 to $3,000,000 in imports of lumber from northern Europe and America, the latter country furnishes only about $100,000 worth, almost exclusively in pitch pine. Not more than four to six cargoes arrive from America annually. This fact is due to the circumstance that vessels with mixed cargoes coming directly from the United States do not arrive at Ghent, and

only pitch pine can be imported in full cargoes. There are also no consignment houses in this city, as at Antwerp; such, for instance, as sell small quantities, say 10,000 kilograms (10 tons) of lumber, especially oak and cottonwood, consigned by foreign exporters. This trade, however, would give the best results. The expense of handling lumber at Ghent is 40 to 60 cents less per 3,500 cubic feet than at Antwerp. American lumber could also be equally as well distributed from this port to Flanders and south Belgium as the German and Russian lumber, which, in fact, is imported here for these districts. Furthermore, there are in this city and vicinity several very important yards for the manufacture of oak railway ties. American oak could be easily introduced for this purpose. The same may be said of cottonwood. The market for all kinds of white pine, such as spruce, small as it is at present, could readily be extended and greatly developed. There is a demand for lumber of the first quality, in certain dimensions, for the manufacture of moldings and panels of wainscoting; lumber of inferior quality is also needed for the manufacture of packing cases, of which a very large number is used in Belgium. A conservative estimate of the annual value of lumber consumed for this last purpose would be $1,000,000.

Full cargoes of these kinds of lumber could be readily sold. All lumber, indeed, is good for importation into Belgium, provided it is light, properly sawn, squared, and free from rot. The usual dimensions are from 2 to 8 inches in width and from 60 inches upwards in length. If business were done directly with the consumers, through an agent or consignee at Ghent, there is an unbounded future for American lumber on this market.

Let me add that I shall be pleased to furnish all possible information to any reliable American firm, and that after exchange of references I am ready to act as such consignee.

Other important lumber dealers at Ghent are: Blancquaert-Van Imschoot, Petit Dock; H. Hye, Petit Dock; Fièvé Claeys, Petit Dock; Fièvé Bruneel, Dock; DeBrabant & Co., Dock; S. Balcaen & Co., Dock; Demoor frères, Conpur (Rive Gauche).

I also addressed a letter to several of the most important consumers of lumber and fine woods in the various trades and industries of this locality. It should first be stated that, outside of building, the most important consumption of lumber in this vicinity is in the manufacture of furniture, cooperage, packing cases, pianos, moldings, carriages, and wagons.

FURNITURE WOODS.

The manufacture of fine furniture for export is an important industry of this city. Church furniture is a specialty. One of the leading firms in this latter manufacture, Messrs. Delannier Bros., writes me:

We employ lumber of all kinds, especially oak, for church furniture. It must be sawed to the proper sizes. American lumber being too expensive, we are obliged to employ Polish oak, which is far from being of as fine quality as American oak, but differs greatly in price, being about one-half as costly.

If prices were satisfactory, we should be pleased to use American woods. American oak is the finest and the best, but prices are too high.

Mr. Charles Verbeke, of the Maison de Blanc, an important general manufacturer of furniture, has, at my request, prepared a comprehensive statement of his needs, and has made suggestions for the development of our lumber trade. His letter reads:

We employ wood for the manufacture of all kinds of artistic furniture; we manufacture largely for export trade. Our business also includes fine carpentry work. We keep all varieties of wood in stock, such as oak, walnut, mahogany, pitch pine, and cottonwood. Our annual consumption amounts to the value hereunder indicated:

Oak, imported from Poland, Russia, Hungary, Slavonia, and America, as well as native oak	$5,000
Whitewood, tulip, cottonwood, both native and imported from Russia	3,000
Walnut, native and from France, Italy, and America	2,500
Mahogany from Cuba, Mexico, Africa, East India, and Tobago	1,600
Beech, cherry, pear, and elm wood, all of native growth	1,000
American pitch pine	4,000
White and red pine from Scandinavia	3,000

We purchase wood in logs, sawn in boards or slabs, and in squared boards or quarter sawn. Of American woods we use chiefly pitch pine, cottonwood, tulipwood, oak, and mahogany. For our purposes, wood must be delivered here in one of the forms just mentioned, the cost of handling and freight being thus greatly reduced. We can obtain all varieties of American lumber on the principal European markets, especially at Antwerp. Unfortunately, most of the trade is in the hands of sole agents, who, instead of being satisfied with their proper commissions, frequently make immense profits, without the knowledge of their American principals. Generally speaking, the prices here of American wood are too high as compared with the prices paid for the same in America, full account being taken of the expense of transportation, etc. For example, we pay for cottonwood in boards of 8, 10, and 13 inches in width from 39½ to 45½ cents per cubic foot. We believe that these same boards do not sell at the mill for more than 19½ to 25½ cents per cubic foot. Oak in fine quality, which is never as clear as Russian or Hungarian oak marked , sells for 90¾ to 99⅛ cents per cubic foot, quarter sawn into boards of 8 to 40 inches in width. These prices are too high, considering that American oak is always reddish.

We are ready to buy American as well as other oak, provided that the quality and prices correspond to those of the same lumber of other origin. It seems to us that, in order to increase the use of American woods, there should be direct transactions between exporters and consumers, and the cut and the quality of the lumber should be satisfactory. To explain more in detail, exporters are accustomed to send cargoes of lumber consigned to agents, who advance to the exporters cash guaranties amounting to one-half or two-thirds of the value of the cargo. These agents calculate interest on the money advanced at the rate of 3 to 6 per cent, and, furthermore, collect high commissions. When the cost of handling several times and of warehousing is considered, it is evident that the price of lumber must be increased. Often the commission alone augments the sale price 10 to 20 per cent.

We understand very well that it has always been considered impossible to carry on the lumber trade without the assistance of intermediary agents; nevertheless, exporters might at the time of their shipments address to their usual customers circulars giving the details of quality, dimensions, and price, as well as the name of the agent. It seems to us that in this manner abuses could be lessened. Those

who make purchases of importance might negotiate directly with exporters, thus greatly reducing the cost.

Cutting of the lumber in America should be more carefully done. The oak which arrives in our markets is almost always of the second and third choice, and, as we have already previously said, of a reddish tinge, which is a great defect. This lumber is furthermore the prey of worms, which gradually gnaw through it. It is not rare to see entire cargoes perforated by worms arrive at Antwerp. This arises from the fact that American lumber is cut at all seasons. It is well known that lumber cut at the time when the sap is rising will ultimately be fatally attacked by worms. Lumber cut in autumn or in winter is not subject to this defect. To obtain superior qualities of lumber, the trees should be cut in winter, as in Slavonia, and should not be sawn into boards until two or three years later.

Another defect of American lumber is that, when it has been sawn by the circular saw, there are never any two boards of exactly the same thickness at both extremities. We know by experience that this is the most rapid process, but it causes the greatest losses, both in sawdust and in wood.

As to the assortment of qualities, we presume that it is the maritime agent who mixes the first and second grades in order to be able to sell them all as first quality. In order to avoid this abuse, the method of marking all boards of one quality with the same mark must be adopted. The purchaser would then be able to verify the good faith of the agent.

We conclude that if American lumber can be offered at more favorable prices, these woods, especially oak, pitch pine, walnut, and tulipwood, will certainly supplant lumber of other growth on our market.

Permit me to direct especial attention to the latter portion of this communication. The criticisms therein made on the methods of American lumbermen and their foreign agents are equally applicable to all branches of the trade, and would undoubtedly be alleged in any other country to which American lumber is exported. Such faults are subject to correction, and, if success is desired in foreign markets, American exporters must use their influence to remove all cause for such criticism.

MATCHES.

The match industry in Ghent and vicinity consumes considerable quantities of lumber. The representative of Messrs. Caussemille & Co., and Roche & Co., whose chief offices are at Paris, with a branch factory at Ghent, replies to my inquiries in the following manner:

The wood which we employ is used exclusively for the manufacture of matches. Heretofore, we have always made use of what is known as "native Canadian poplar," although this wood, being of inferior quality, is not entirely suitable for the manufacture of matches. We have employed Riga aspen wood, purchased in logs, and it has given better results than the so-called poplar.

We should be disposed to use American lumber, either in small blocks or in planks; but, unfortunately, lumber of small dimensions pays a high rate of duty. In purchasing American wood, we should prefer to receive it in the form of match sticks entirely cut, so as to pay freight only on the quantities used. Match sticks, however, pay a too high rate of duty, unless upon the reexportation of finished matches the duties paid should be refunded.

American woods are too high priced to bear the addition of the duties. We should be glad to employ United States wood if we could escape the payment of duties. Our most serious competitors, the English, employ for all their matches American lumber, which does not pay any duty on entering England. They manufacture with this wood matches which are superior to all others and are preferred by the public. If we enjoyed conditions equally favorable, we should undoubtedly employ large quantities of American wood in our trade.

Another important manufacturer, Mr. Byl-Campen, of Grammont, writes:

I use aspen wood for the manufacture of matches to the extent of 65 per cent; the other 35 per cent of wood employed by me consists of "native Canadian poplar." I purchase round logs 3 meters (10.58 feet) long and 26 centimeters (10.23 inches) or more in diameter.

I have never used American wood, and I do not know if America has any suitable for this purpose.

The wood must be of the preceding winter's cut, without knots, and must never have been floated. All the aspen wood necessary can be obtained at very reasonable prices, but it requires experience to avoid difficulties in importing it.

I am disposed to purchase from America, quality and prices being the same. Conditions and terms of sale and payment could be much more favorable than at present.

I estimate the importation of aspen wood into Belgium during 1897 at about 509,000 cubic feet.

CARRIAGES.

Mr. J. Lefert, a large carriage manufacturer of this city, writes me:

Wood is employed in our industry for bodies, wheels, and skeletons. The woods employed are elm for the greater part of the bodies, ash for the fellies of wheels, and native walnut and various exotic woods for the skeleton woodwork. The ash, elm, and acacia woods are purchased in logs of the necessary sizes.

We employ American woods—American black walnut, mahogany, and Canary whitewood for the panels and tops of carriages, hickory for the shafts of two-wheeled vehicles and for wheel fellies, and hickory and bock elm for wheel hubs. All these woods reach us cut either in the thickness for the panels or ready to be used for sides, shafts, and wheel fellies. The wood for hubs arrives in blocks. These woods are bought of English or Belgian importers. While there is no difficulty in obtaining what we need, we are frequently annoyed by the delivery of a quality inferior to that which we have ordered. The general impression is that the United States exports only the second and third qualities, the first qualities being consumed in that country. My opinion is that the trade of American lumber in Belgium could be increased by attention to quality. For our industry, however, the varieties of wood employed are too numerous and the quantity required by each carriage manufacturer is too small to warrant direct importation; we must necessarily purchase from general importers.

Other carriage manufacturers are: C. DePauw, Rue Charles Quint; Stevens-Muyuck, Chaussée d Hundeljhem; and Michotte-Carlier, Cour du Prince—all of Ghent.

PACKING CASES AND BARRELS.

The National Packing Case Factory writes as follows:

We employ lumber for the manufacture of packing cases. Our principal article of import is Scandinavian pine; it amounts to about 70,000 cubic feet per year. We likewise employ aspen wood in a much smaller quantity.

For the manufacture of wood wool, we receive the pine in the form of small sticks, without bark, of various lengths and diameters.

We do not employ American wood in our industry. To be suitable, it must arrive as just specified.

COOPERAGE.

From Mr. J. Vermandere, who has an important cooperage establishment, I have received the following:

My great specialty is cement and fruit barrels, for which I employ pine coming from Norway, Sweden, and Russia, sawn to the following dimensions: For cement barrels, 1½ by 28 by 2½ to 5 inches; for fruit barrels, ½ by 31 by 2½ to 5 inches. At Antwerp and Ghent there is large importation of these staves, which are sold by the St. Petersburg standard (165 cubic feet). I require about 1,000 standard annually, which I easily obtain here. Terms of sale are generally four months' credit.

For packing cases, I use pine wood, which I purchase of local merchants. I do not know if American lumber would serve my purposes. I am not acquainted with any other kind than pitch pine, which I can not use. I do not believe that other American lumber would be suitable for cooperage purposes, unless it could be obtained in qualities similar to those coming from Scandinavia and sawn to the necessary dimensions.

MOLDINGS, PICTURE FRAMES, ETC.

For moldings, picture frames, and mantels, Messrs. Braun & Co., of this city, give the following information:

We use lumber in the manufacture of moldings, panelings, and picture frames. The wood employed is red fir. Our consumption amounts to 70,000 to 80,000 boards per year. The lumber is purchased in the form of boards of 10 feet long by 4 to 5 inches wide, and seven-eighths to 1 inch thick.

American white cottonwood, the only whitewood imported here, does not suit our needs, as it twists too much in the process of manufacture. American lumber is good for cabinetmaking.

The price of red fir coming from Scandinavia varies from 24½ to 38¼ cents per cubic foot, according to quality.

While we can not use American cottonwood, we should be pleased to make trials of other American lumber, if imported.

In the same line of manufacture, Messrs. E. Maes & Co. write me as follows:

We do not import from America, because we would be obliged to buy in too large quantities; we purchase in Antwerp according to our needs. The varieties

employed by us are white oak and cottonwood, quarter sawn, such as are used for cabinetmaking.

The greater portion of our lumber comes from Danzig and Slavonia or Hungary.

Wholesale prices for Danzig oak range from 7¾ to 11½ cents per cubic foot c. i. f. Ghent. Retail prices run 39½ to 56½ cents per cubic foot.

There would be a possibility of increasing the import trade in American oak, if it were whiter. The greater part is red. In regard to the sawing, also, there is room for improvement.

PIANOS.

Mr. Van Hyfte, piano manufacturer, expresses his opinion as follows:

For the most part we employ poplar, fir, and beech wood; also, in smaller quantity, lime wood, walnut, mahogany, oak, rosewood, and blackwood. We buy poplar, beech, and lime wood by the entire tree, and fir by the running meter, according to our needs. Our veneering lumber, such as oak, mahogany, maple, blackwood, and American poplar, is furnished us by Paris dealers. We have never had any difficulty in procuring our supply. Prices of native woods, such as used by us, have increased lately about 20 per cent.

We could employ American poplar if it could be delivered at a price no higher than that paid for the first quality of the native wood.

The production of Belgian woods for our purpose is decreasing annually.

Mr. A. Crasset, of the firm of Vits, also piano manufacturers, says:

I employ annually about 50,000 cubic feet of lumber, 1 inch wide by about one-tenth of an inch in thickness. I have to purchase my supplies five years in advance, in order to dry the wood sufficiently. I can not obtain wood already dried. It is becoming more and more difficult for piano manufacturers to secure the woods required by them. Nearly all that I use is of Belgian growth, and poplar predominates.

I do not buy from dealers, but directly from the owners of ground on which I find such trees as please me. Two or three times every year I drive through the country to pick out the trees which I wish to purchase.

Prices are constantly advancing; for poplar costing ten years ago 2 cents per square foot, I now pay 2½ cents.

I could employ fir wood if it were without knots and perfectly dry and light.

I am disposed to think that the Belgian Syndicate of Piano Manufacturers (Syndicat des Fabricants de Pianos) at Brussels would be glad to consider arrangements for importing in bulk sufficient lumber to supply the needs of all its members. For my part, I shall be pleased to hear from American exporters of fine woods, such as are used in piano manufacturing.

MISCELLANEOUS MANUFACTURES.

Considerable quantities of lumber are required here for general building purposes, and also for the construction of various maritime works. For this latter purpose, pitch pine, white pine, and yellow pine are in demand and are sometimes difficult to obtain. Small quantities of lumber are also required for the manufacture of machinery models, bobbins, etc.

DUTIES.

Attention should be directed to the rates of duty assessed on all lumber imported into Belgium. They are per cubic meter (35.316 cubic feet):

Oak and walnut wood; and building and cabinet woods other than oak or walnut, in logs or unsawn; and joists and pieces of lumber in the log or unsawn, less than 29 inches in circumference	0.19\frac{3}{10}$
Building and cabinet woods (except oak and walnut):	
Beams, sawn	.38$\frac{8}{10}$
Beams, otherwise prepared	1.16
Sawn beams, planed	1.74
All other lumber	Free.

CONCLUSION.

American exporters of lumber desirous of increasing their trade must conform to the usage of the country in their methods, especially in the system of measurement. All lumber sold on this market is quoted by the cubic meter; any other method of giving quotations is unintelligible to Belgian dealers, and all price lists should be made on this basis. The adoption of this suggestion would of itself undoubtedly occasion a considerable increase in our sales. All correspondence should be in the French language, and care should be taken to employ the correct technical terms in describing the variety and condition of lumber offered, as confusion is very apt to arise. Sometimes an innocent error thus committed is attributed to a want of good faith and leads to a permanent loss of trade. If the suggestions made in this report be followed and this market be carefully studied, I am convinced that the sale of American lumber at Ghent and throughout Belgium can be very materially increased.

HENRY C. MORRIS,
Consul.

GHENT, *June 16, 1898.*

INDUSTRIAL AND COMMERCIAL CONDITIONS IN URUGUAY.

PROFIT OF THE MEAT-EXTRACT BUSINESS.

The thirty-second annual meeting of the English directory of the Liebig Meat Extract Company, Limited, held at Fra Bentos, has been the means of showing the profit that there is in the meat-extract business in Uruguay. For the year's work, a balance of £122,376.10 ($595,545) was set aside; an ad interim dividend of 5 per cent was paid at one time, and 15 per cent at the close of the year—20 per cent net, free from all English income tax. After providing £15,000

($72,997) for sundry expenditures, there was left £7,128 ($34,688) to carry forward into the new account of profit and loss for 1898. The company owns a large number of cattle, and is considered one of the most profitable enterprises in South America.

GOLD PRODUCTION.

An official statement recently published shows that the amount of auriferous quartz crushed in the Republic in 1897 was 6,400,791 kilograms (14,111,183 pounds), and the yield of gold was 87,336 grams (3,527 ounces), which sold for $38,505.71.* The reduction of the quartz is deemed wholly unremunerative; but there are hopes always of making a "big strike," and so the work is kept on. It may be added here that the gold-mining industry is handicapped by an old concession, more or less contested, which calls for a contribution of 25 per cent to the man claiming it. The courts have decided the question both ways, and there is always a lawsuit in sight for any company entering the field.

GERMAN VS. ENGLISH TRADE.

The Germans have made great inroads on the trade of Uruguay, heretofore almost wholly occupied by English manufactures. For 1897, the British exports decreased in the following items:

Woolen mixtures, 372,000 yards; worsted cloths, 267,000 yards; cotton cloths, 7,700,000 yards. In this last item, the English exportations to Uruguay in 1896 were over 14,000,000 yards.

The German goods, while cheaper, have also lacked the good qualities of those supplanted, in very many lines; but the Germans have studied the market and met its demands, while the English manufacturers are too conservative to make changes. The Germans will necessarily improve the quality of their goods, in order to hold the market captured by them. It should be said here that in cotton goods the United States is making satisfactory advances, our manufacturers having heeded the advice given them.

AGRICULTURAL IMPLEMENTS.

The year 1898 will see the largest import of United States agricultural machinery yet recorded in Uruguay. Nearly all our machines have won their place on the market by sheer merit, being more serviceable, lighter, less liable to breakages, and better suited for the purpose intended. Intelligent agents have done excellent work in this line, and the machines will do their own talking in the

*The Uruguayan dollar equals $1.034 in United States currency.

harvest fields of this Republic in 1898. As long as the quality is maintained, our exports in these lines will increase at the expense of those of foreign make—some of which are rank counterfeits of American goods.

ALBERT W. SWALM,
Consul.

MONTEVIDEO, *June 29, 1898.*

HARBOR IMPROVEMENTS IN MONTEVIDEO.

The Provisional Government of Uruguay has presented to the Council of State a scheme for the improvement of the harbor of Montevideo, which is sure to become a law, and which, when accomplished, will be hailed by all having to do with the commerce of this port as of the greatest possible benefit.

An appropriation of $15,400,000 is provided for, to be in 327,659 bonds of $47, or £10, each; interest to be 6 per cent per annum, payable quarterly, either at Montevideo or in some European financial center.

As one of the items of the redemption fund, a tax of 2½ per cent is to be levied on all importations.

All the new port dues are also set aside for the bonds and interest. A financial commission is to take charge of the matter, and within a year the bonds are to be on the local and general market.

The scheme adopted is that known here as the Kummer-Guerrard plan. The lowest water is to leave 7½ meters (24.52 feet) in the canal. A careening dock, 200 meters (656.17 feet) long and of corresponding width, with 8 meters (26.24 feet) of water on the lowest beams, is also provided for.

The Executive Power is authorized to call for tenders for the construction of the work among capable and responsible European and American firms, reserving the right to reject all offers unless a suitable one is made. In case a contract is made, an appointment of a technical commission is authorized, to superintend the work. Should no general contract be made, tenders for partial completion may be accepted. All payments for work done are to be in gold, and on monthly estimates, to be made by the technical commission and certified to in the usual way. When the sum of $15,000,000 shall have been expended, all contracts will be deemed canceled if the work is not completed, and no claim for damage in any way will be considered. I may add that the conditions of the harbor are not very dissimilar to those at Galveston.

The Government is able to enforce and carry out all engagements that may be entered into. Uruguay is the one South American

Republic which has constantly maintained a sound monetary standard. There have been forced changes of government, but no alteration of the monetary basis.

ALBERT W. SWALM,
Consul.

MONTEVIDEO, *June 28, 1898.*

COAL IN VENEZUELA.

Nearly all the coal consumed here is of English origin, and is mined in the vicinity of Cardiff, Wales, whence it generally comes in sailing vessels. The close proximity to the American coal fields and the total absence of the American product in this market have led me to investigate the matter, as the consumption of coal here is considerable.

The several railways, of which the La Guayra and Caracas and the Great German Railway, from Caracas to Valencia, are the largest, burn Cardiff fuel. All the coal retailed here comes from the same source, and many of the larger enterprises which consume such fuel use the British article; and this at a very high figure, evidently because of lack of competition.

The retail price of coal by the ton of 2,240 pounds varies from 14 to 16 pesos ($11.20 to $12.80). This is the price generally paid in quantities from 1 to 20 tons, or even more.

One of the chief reasons why this coal is preferred, is that it is put up by the Welsh miners into small bricks or "briquettes," 7 by 8 inches in thickness and about 11 inches long. This makes it very easy to handle on the small engines employed by the railways, which do not, like our engines, have a tender attached to them, but carry their fuel upon a small platform attached to the engine where ordinary coal would roll off. Again, this kind of coal being in use for some time, the grates in the boilers have been built to suit it, and loose coal might not answer as well.

The coal is pressed by means of tar, and is then brought on board the vessels, sometimes steaming hot, and for this reason frequently loses in weight during transportation by evaporation and drying, which loss is borne by the consignee.

Owing to the late strikes in the coal mines of Wales, very little coal has arrived here lately; but, in spite of this fact, no American coal has been landed at this port, except a special kind of hard coal used for the manufacture of gas.

There is an excellent opening here for United States coal, and no doubt the same holds good in many South American countries; but our exporters must meet the demands of the trade.

I have no doubt that American coal can be landed here and sold

much cheaper than British coal, and still leave an excellent profit for the shipper. Any organization that will manufacture coal into bricks of the proper dimensions and send an able representative here to introduce the article, can find an excellent market. I further believe that for this purpose a grade of soft coal can be used that is not always marketable in the United States.

Coal is mined in this country close to the port of Barcelona; but the quality seems to be inferior, and it is not sold when other coal can be had.

Coal pays no duty entering here.

LOUIS GOLDSCHMIDT,
Consul.

LA GUAYRA, *July 15, 1898.*

THE ARGENTINE WHEAT MARKET.

The history of the Argentine wheat market during the present shipping season is one of totally unexpected developments, the most of them being unwelcome to those interested in the trade.

At the very commencement of the harvest, a state of affairs prevailed that augured badly for the peace of mind of those who preferred a quiet business to violent fluctuations. The scarcity of wheat towards the end of last year had driven local prices far above the rate that exporters could afford to pay. The same cause contributed to maintain them for a short time after the harvesting of the new crop had started; but, once millers had bought sufficient for their requirements, a rapid decline in prices set in.

Many exporters had contracted heavy tonnage engagements, in view of the comparatively large quantity of grain in sight; but the rains delayed transportation, and farmers held their wheat. A fall in freights ensued, and gold appreciated in value, making the position of sellers independent. Throughout February and March, the market continued in this state. In April, a firmer tone set in in the home markets, due to the scarcity of supplies becoming more apparent.

The outbreak of hostilities between the United States and Spain was, however, the signal for one of the most phenomenal rises ever chronicled in the wheat market. On the 1st of April, the value here was $8.50; on the 15th, it was $10; on the 22d, it was $11; and on the 7th of May, it was $12.50 to $13. Shortly after that date, a change supervened at home. From quiet the markets drifted into depression, and from depression to panic was but a step; buyers withdrew altogether, and prices have returned to more or less the value of January.

At present, the market is almost entirely paralyzed. Although there is still a large quantity of grain outside, very little is being offered. There is still time for damage to be done to some of the growing crops, and a rise in gold may cause an advance in paper values.

Regarding shipments, I am inclined to put them at a full million tons for the year ending December 31, including those from Uruguay. With the exception of last year, it has been found that by the 30th of June two-thirds of the Argentine crop is shipped. Up to the 18th instant, 638,000 tons had been shipped from Argentina and about 120,000 tons from Uruguay. The rise may have accelerated shipments a little, but it did not last long enough to have much effect. There is a large stock in Buenos Ayres.

Locusts have made an early appearance this year, the Province of Santa Fé being full of them. They will be of benefit at first, preventing the too rapid growth of the plant. But these locusts may be followed by others, with results disastrous to the harvest.

D. MAYER,

BUENOS AYRES, *June 28, 1898.* *Consul.*

PIRACY NEAR MARACAIBO.

I wish to call attention to an incident which ought to be of interest to the owners and masters of sailing vessels doing business with this part of Venezuela.

On the 10th of this month, the German bark *Hedwig* left the port of Maracaibo for Mexico. Later in the same day she encountered heavy squalls, and, as she was in ballast, drifted toward the Goajira coast and came on the shoals of the old entrance to Maracaibo, the Paijana, about 12 miles from Fort San Carlos. The next day she was surrounded by Indians under charge of Rudecindo Gonzales, a half-breed, known as "Cachimbo."

The captain of the *Hedwig* was not allowed to go to the fort for assistance, but was driven out of his vessel, together with the crew, by force. They walked to the town of Sinamaica, a few miles from Paijana, and hired a boat to convey them to Maracaibo, where they made their declaration before the German consul.

This is, to my personal knowledge, the fourth case of piracy committed on large foreign sailing vessels close to Fort San Carlos. None of the vessels had a gun or a rifle on board. Had the master of the *Hedwig* been provided with a signal gun or firearms, he could have easily kept his vessel until relief was sent from Fort San Carlos,

the authorities in charge of which had not the slightest idea of what was occurring close to them.

I believe it would be prudent for sailing vessels bound for this port to be provided with breech-loading rifles and ammunition, as well as with a signal gun. From the deck of a vessel, protected by the woodwork of the railing, a crew should be able to withstand assaults until assistance could be rendered.

The case, some years ago, of the loss of the French brig *Constance*, loaded with a valuable cargo for Marseilles, was somewhat different. She had drifted on the shoals of the Goajira coast at low tide, and the crew, in boats, was pulling the ship off at high tide when the Indians, some swimming and others in canoes, attacked the vessel. Only the captain, cook, and cabin boy were on board, and they were forced to swim to the boats, which were afterwards picked up by a coasting schooner. A few of the Indians had old Remington rifles, many were armed with machetes, and others with bows and arrows. Had the *Constance* been furnished with an alarm gun, the attention of friendly Indians might have been attracted, and, as the frontier post of Paraguaipó was only about 15 miles distant, help would have been obtained.

It should be noted that sailing vessels carrying arms must manifest the same and have them duly sworn before the Venezuelan consul, otherwise they will be considered as contraband by the custom-house authorities and confiscated; the vessel will also be subject to a heavy fine.

E. H. PLUMACHER,
Consul.

MARACAIBO, *June 20, 1898.*

SMELTING WORKS IN MEXICO.

There are two smelters in operation in the vicinage of this city, the larger having a daily capacity of 500 tons, which, in 1897, resulted in producing 7,076,544 ounces of silver, 23,830 ounces of gold (both Troy weight), and 22,912 tons of lead. The smaller smelter has a capacity of 90 tons daily. The larger has ten blast furnaces, together with the necessary appurtenances for their operation, while the smaller has six "water-jacket" furnaces of a capacity of 90 tons daily and three revolving furnaces of 40 tons per day in the aggregate, with the necessary apparatus to operate them. The entire annual output of ore and constituents amounts to 112,000 tons.

Assay offices are connected with each of these establishments. Twenty thousand tons of coke and 5,000 tons of coal are annually consumed at the smaller smelter, and a proportionate amount at the

larger. Of lead, 13,944,000 kilograms (30,740,942 pounds) were produced in the smaller smelter from May 1 to April 30, 1897–98, and 18,000 kilograms (39,683 pounds) of silver and 300 kilograms (661 pounds) of gold during the same period. From 400 to 500 men are annually employed at the smaller and about 700 at the larger smelter, the daily pay roll of the latter being about $1,000 in Mexican money ($452 in United States currency*). Laborers at the smaller smelter receive from $1 to $5 daily in Mexican money (45 cents to $2.26), and are paid weekly. Skilled labor is paid monthly. Salaried officers receive from $100 to $600 in Mexican money ($45 to $271) monthly.

Both establishments do a large business with the United States, the products being shipped, and practically all supplies being obtained therefrom; the larger importing over 30,000 tons of coke alone during the year 1897. Smelting commenced here about 1891. It has increased each year since, and, in view of the apparently inexhaustible supply of minerals in Mexico, it is only in its incipiency.

The names of the respective smelting establishments are La Gran Fundicion Nacional Mexicana and Cia. Minera Fundidora y Afinadora Monterey.

JOHN K. POLLARD,
Consul-General.

MONTEREY, *July 27, 1898.*

COPYRIGHT LAW OF MEXICO.

Consul-General Barlow sends from the City of Mexico the following synopsis of the copyright law:

The copyright law of Mexico establishes that for legal effect there will be no distinction between Mexicans and foreigners, provided the work in question be published in Mexico. The author enjoys the copyright during his life; at his death it goes to his heirs. Consequently, it is a right which he can dispose of as any other kind of property in his possession. By prescription, however, his right expires in the course of ten years.

The law concedes to the author the right of publishing translations of his works, but in this case he must declare whether he reserves his right to one or to all languages. This right is granted for ten years to authors who do not reside in Mexico and who publish their works abroad.

In order to acquire the copyright, the author, translator, or editor must apply personally or by his representative to the Department of Public Instruction, making note that he reserves his rights and accompanying same with two copies of his work.

All authors, translators, and editors should put their names, the date of publication, and notice of their copyright in a prominent place of said copies.

If it be desired to obtain copyrights of some work of music, engraving, lithograph, or the like, two copies must also be sent. If it be a work of architecture,

* According to the 1898 valuations by the Director of the United States Mint.

painting, or sculpture, a sample of the drawing or a plan, giving dimensions and all other details which characterize the original, shall be presented.

A foreign author not resident in Mexico must send power of attorney, drawn before a notary public and certified by a Mexican consul. This in its turn has to be legalized by the State Department of Mexico and protocolized, duly translated. For these operations $25 is charged and $25 more for the work to be done in obtaining the copyright, including the value of federal stamps, which have to be attached to the writing filed before the Department of Public Instruction. Hence for the whole there is charged $50 Mexican currency.

DUTIES IN GUADELOUPE: SCARCITY OF MEAT.

Referring to my reports of May 24 and July 6,* a curious condition now exists in the collection of customs. The action of the General Council has had the effect of practically removing all duties from flour, kerosene, and some other articles. These paid high duties under the "droit de consommation" and "octroi de mer." Both have been abolished, to be replaced by direct duties. But this requires the approval of the French Government, and that will take from two to six months to obtain. Meanwhile, these articles are paying only a few cents, instead of dollars, in duty. Some merchants are reaping a harvest, for prices have not fallen. It is not likely that the French approval can be made retroactive, and there will be a great loss to the colonial treasury.

The rate of exchange has again fallen. The bank rates, which went into effect a week ago, are as follows:

Drafts on Paris, 100 francs and over:	Per cent.
90 days	26
60 days	27
30 days	28
10 days	29
Orders on Paris, 1 to 100 francs, sight	30

Provisions are again scarce, except flour, beans, and pease, and prices are higher.

In meat, there is practically a famine. All meat—beef particularly, for little else is consumed here—came heretofore from Puerto Rico. The war with Spain stopped this trade, and the last stock from that island has been slaughtered. Very little meat is now to be had, and the prices are very high. Diseased cattle are being slaughtered. Some animals and some dressed meat were condemned two days ago, and ordered sunk in the bay. A riot was with difficulty averted, and it is asserted that the condemned meat was during the night recovered and sold.

*See CONSULAR REPORTS No. 215 (August, 1898), p. 594, and No. 216 (September, 1898), p 130.

Beef costs 35 cents a pound; flour, $10 a barrel; chickens, small, live, 80 cents to $1; and other articles in proportion. Fish, although high in price, can be had in fair quantity and first-class condition.

LOUIS H. AYMÉ,
Consul.

GUADELOUPE, *July 20, 1898.*

MODIFICATIONS OF CANADIAN TARIFF.

Consul-General Turner sends from Ottawa, under date of July 29, 1898, copy of a recent amendment to the Canadian tariff, affecting the preferential duty for Great Britain and colonies. By the Canadian tariff which went into effect April 23, 1897 (see CONSULAR REPORTS No. 205, October, 1897), the reduction of duty in favor of "favored nations" was one-eighth, or 12½ per cent, from April 23, 1897, to June 30, 1898. This applied to Great Britain, Belgium, Germany, France and colonies, Algeria, Tunis, Austria, Sweden and Norway, Denmark, Persia, Russia, Switzerland, Argentina, Bolivia, Colombia, and Venezuela. It did not apply to the United States. On July 1, 1898, the reduction was to be increased to one-fourth, or 25 per cent; the date for this second change was afterwards extended to August 1, 1898. According to the amendment transmitted by the consul-general, the countries which will receive the benefit of the 25 per cent reduction of duty on August 1, 1898, are limited to the United Kingdom, Bermuda, British West Indies, British Guiana, and other British possessions which grant Canada preferential rates. Under this last clause, the minister of customs has extended the benefit of the reduction to British India, Ceylon, Straits Settlements, and New South Wales. The amendment reads:

AN ACT TO AMEND THE CUSTOMS TARIFF, 1897.

[Passed June 13, 1898.]

Her Majesty, by and with the advice and consent of the senate and house of commons of Canada, enacts as follows:

1. Section 6 of the customs tariff, 1897, is hereby repealed and the following is substituted therefor:

"6. The importation into Canada of any goods enumerated, described, or referred to in Schedule C to this act is prohibited; and any such goods imported shall thereby become forfeited to the Crown and shall be destroyed or otherwise dealt with as the minister of customs directs; and any person importing any such prohibited goods, or causing or permitting them to be imported, shall for each offense incur a penalty not exceeding $200."

2. On and after the 1st day of August, 1898, section 17 of the said act shall be repealed and the following shall be substituted therefor:

"17. Articles which are the growth, produce, or manufacture of any of the following countries may, when imported direct into Canada from any of such countries, be entered for duty or taken out of warehouse for consumption in Canada at

the reduced rate of duty provided in the British preferential tariff set forth in Schedule D to this act:

(*a*) The United Kingdom;

(*b*) The British colony of Bermuda;

(*c*) The British colonies commonly called the British West Indies, including the following:

The Bahamas;

Jamaica;

Turks and Caicos Islands;

The Leeward Islands (Antigua, St. Christopher-Nevis, Dominica, Montserrat, and the Virgin Islands);

The Windward Islands (Grenada, St. Vincent, and St. Lucia);

Barbados;

Trinidad and Tobago;

(*d*) British Guiana;

(*e*) Any other British colony or possession the customs tariff of which is, on the whole, as favorable to Canada as the British preferential tariff herein referred to is to such colony or possession.

Provided, however, that manufactured articles to be admitted under such preferential tariff shall be bona fide the manufactures of a country or countries entitled to the benefits of such tariff, and that such benefits shall not extend to the importation of articles into the production of which there has not entered a substantial portion of the labor of such countries. Any question arising as to any article being entitled to such benefits shall be decided by the minister of customs, whose decision shall be final.

"2. Raw sugar, including all sugar described in item 436 of Schedule A, may, when imported direct from any British colony or possession, be entered for duty or taken out of warehouse for consumption in Canada at the reduced rate of duty provided in the British preferential tariff.

"3. The minister of customs, with the approval of the governor in council, shall determine what British colonies or possession or possessions shall be entitled to the benefits of the preferential tariff under paragraph (*e*) of subsection 1 of this section.

"The minister of customs may, with the approval of the governor in council, make such regulations as are deemed necessary for carrying out the intention of this section."

3. Item 221 in Schedule A to the said act is hereby repealed and the following substituted therefor:

"221. India rubber boots and shoes; rubber belting, rubber cement, and all manufactures of india rubber and gutta percha, not otherwise provided, 25 per cent ad valorem."

4. Items 435 and 436 in Schedule A to the said act are hereby repealed and the following are substituted therefor:

"435. All sugar above No. 16 Dutch standard in color, and all refined sugars of whatever kinds, grades, or standards, testing not more than 88° by the polariscope, $1.08 per 100 pounds, and for each additional degree 1½ cents per 100 pounds. Fractions of five-tenths of a degree or less not to be subject to duty, and fractions of more than five-tenths to be dutiable as a degree.

"Sugar, not elsewhere specified not above No. 16 Dutch standard in color, sugar drainings or pumpings drained in transit, melado or concentrated melado, tank bottoms and sugar concrete testing not more than 75° by the polariscope, 40 cents per 100 pounds, and for each additional degree 1½ cents per 100 pounds. Fractions of five-tenths of a degree or less not to be subject to duty, and fractions

of more than five-tenths to be dutiable as a degree. The usual packages in which imported to be free.

5. On and after the 1st day of July, 1898, items 445 and 446 in Schedule A to the said act shall be repealed.

6. On and after the said 1st day of July, the following item shall be inserted in Schedule B to the said act instead of item 616:

"616. Tobacco, unmanufactured, for excise purposes under conditions of the inland revenue act."

7. On and after the 1st day of August, 1898, Schedule D to the said act shall be repealed and the following substituted therefor:

"SCHEDULE D.

"BRITISH PREFERENTIAL TARIFF.

"On articles entitled to the benefit of this preferential tariff under section 17, the duties mentioned in Schedule A shall be reduced as follows: The reduction shall be one-fourth of the duty mentioned in Schedule A, and the duty to be levied, collected, and paid shall be three-fourths of the duty mentioned in Schedule A.

Provided, however, that this reduction shall not apply to any of the following articles and that such articles shall in all cases be subject to the duties mentioned in Schedule A, viz: Wines, malt liquors, spirits, spirituous liquors, liquid medicines and articles containing alcohol; tobacco, cigars, and cigarettes.

Provided, further, that the reduction shall only apply to refined sugar, when evidence satisfactory to the minister of customs is furnished that such refined sugar has been manufactured wholly from raw sugar produced in the British colonies or possessions.

8. Except as herein otherwise provided, this act shall be held to have come into force on the 6th day of April, in the present year, 1898.

CANADIAN CUSTOMS REGULATIONS FOR SPORTING OUTFITS.

The following has been received from Consul-General Turner, dated Ottawa, July 29, 1898:

I inclose memorandum issued by the customs department of Canada regarding the entry of sporting outfits brought into the country by members of Canadian fishing and hunting clubs who are residents of the United States.

The regulations read, in part:

(1) Any organized shooting or fishing club which has duly obtained shooting or fishing privileges in any Province in Canada may deposit, with the department of customs at Ottawa, a guaranty as security for the due exportation or payment of duty on the sporting outfits brought into Canada temporarily, for their own use and not for gain or hire, by members of the club resident outside of Canada.

(2) The "guaranty," if approved by the minister of customs, shall continue in force for the time specified therein, unless otherwise ordered, and "guaranty certificates" indicating such approval may be signed and forwarded to shooting and fishing clubs by the commissioner of customs, to be presented to customs officers (and returned to visiting members after inspection) as evidence of the deposit and approval of the club guaranty.

(3) A special ticket of membership signed by the secretary of the club and dated within one year from the time of its presentation to the customs officer may be accepted by such officer as evidence that the person presenting the ticket is a visiting member of such club resident outside of Canada.

(4) Visiting members (nonresident in Canada) of any shooting or fishing club, which has deposited a "guaranty" approved by the minister of customs as herein provided, may bring with them such guns, fishing rods, and sporting outfit as they require for their own use and not for gain or hire, conditional on exportation within ninety days from time of entrance, upon depositing a ticket of membership signed as before mentioned and furnishing to the customs officer at the port of entry in Canada a report (in duplicate) signed by him and containing a description of the articles comprised in his outfit and giving the value thereof: Provided, however, that duty shall be paid on ammunition and provisions brought in with such outfit.

(5) One copy of the report, stamped by the customs officer for identification, shall be handed back to the party presenting the same, so that a certificate as to the exportation of the articles may be indorsed thereon by a customs officer when they are not exported outwards and examined by a customs officer at the port of entry where they have been brought into Canada.

* * * * * * *

HARBOR AND RAILWAY IMPROVEMENTS IN ONTARIO.

A slip dock has been constructed at Port Stanley by the Lake Erie and Detroit River Railway Company. It will be completed on or shortly after August 1, and a car ferry line put in operation at once. The boats which will run to that port are those now used between Conneaut and Port Dover, and the railroad connection with the United States will be with the Pittsburg, Bessemer, and Lake Erie Railroad, through which connection will be made with the Baltimore and Ohio, Allegheny Valley, and, in fact, all roads running out of Pittsburg. Connections will be made in Canada over the Lake Erie and Detroit River Railroad with the Grand Trunk, Wabash, Michigan Central, and Canadian Pacific at St. Thomas.

The principal traffic at first will be in hard and soft coal for all points in western Ontario. It will be loaded on the cars at the mine's mouth and laid down in the yard of the dealer, thus saving all intermediate handling and consequent expense, which should result in a lowering of price to the consumer. The cost of transferring the coal from vessel to cars at Port Stanley has ranged from 8 to 10 cents per ton for steam power and 15 to 17 cents per ton for horsepower.

The Dominion Government, I am informed, is about to expend from $15,000 to $25,000 in dredging the Port Stanley Harbor and retimbering the piers, in order to give access to the heavy-draft lake vessels. The lack of this improvement has been the cause of diverting much traffic from Port Stanley in recent years. It is probable

also that a larger and more modern passenger boat will be placed in service between Port Stanley and Cleveland, to supplant the steamer *Flora* now operated by the Lake Erie and Detroit River Railway.

INCREASED RAILROAD TRAFFIC.

Commencing with the month of March of this year, the Wabash Railroad entered into an arrangement with the Grand Trunk to operate over the latter's "loop" line from Detroit to Buffalo, making two through American lines to the Atlantic seaboard, viz, the Michigan Central, connecting with the New York Central at Buffalo, and the Wabash, connecting with the West Shore at the same point.

Following is an approximate summary of the daily train service through this city:

Road.	Character of trains.	Summer.		Fall, winter, and spring.	
		Number of trains.	Cars.	Number of trains.	Cars.
Michigan Central	Freight	20	760	52	1,966
Do	Passenger	18	108	18	108
Wabash	Freight	13	364	26	728
Do	Passenger	8	48	8	48
Grand Trunk	Freight	2	46	2	46
Do	Passenger	2	12	2	12
Lake Erie and Detroit River Rwy	do	8	40	4	20
Do	Accommodation	4	28		
Canadian Pacific	Passenger	2	10	2	10
Do	Freight	2	40	2	40
Total		79	1,456	116	2,978

NEW ELECTRIC STREET RAILWAY.

The city of St. Thomas heretofore has had practically no street railway accommodations, there being in operation only about 1¼ miles of 3-foot-gauge horse-car road. A new electric trolley system was completed on June 15. The road is a belt line, 6.1 miles in length, running around the city. With the exception of the overhead joints and fixtures, which were purchased from the Ohio Brass Company, of Mansfield, the line was built and equipped with Canadian material, the total cost being $85,000. The rails were made at Hamilton, Ontario; the engines at Amherst, New Brunswick; dynamos and electrical equipment were purchased of the Canadian General Electric Company, Toronto; and the motors, eight in number, and two trailers were manufactured by the Ottawa Car Company. The motors are the latest pattern double controllers and cost $2,800 each.

It is intended to extend the line to Port Stanley, 9 miles south, and possibly to London, 15 miles north.

The city of St. Thomas has also under construction this summer a new city hall costing $45,000, two new public schools costing $50,000, and is repaving the business district with vitrified brick instead of cedar blocks. There is a marked aspect of prosperity in all directions throughout the district, which is increasing each day as the harvest yield becomes more positively assured.

M. J. BURKE,

ST. THOMAS, *July 30, 1898.* *Consul.*

BICYCLES IN ONTARIO.

I inclose an editorial from an Ontario paper commenting on the proposed changes in the manufacture of bicycles for the 1899 trade. The consensus of opinion of experienced wheelmen and wheelwomen with whom I have talked is that it would detract immeasurably from the popularity of the wheel with pleasure seekers to increase its weight. This is particularly true with reference to women and the more weakly class of men, who ride solely for air and health, and who are not addicted to rough riding or to scorching.

M. J. BURKE,

ST. THOMAS, *July 30, 1898.* *Consul.*

NEXT YEAR'S BICYCLE.

[Extract from the London, Ontario, Free Press, July 27, 1898.]

It is reported that a few makers have arranged to turn out 30-inch wheels next year, and that the price of those machines will probably be somewhat more than is charged for this year's models with wheels of less diameter. Modifications are also promised in bearings, adjustments, sprockets, cranks, and enamel; and the '99 models are likely to be prettier than those of '98. But one thing about the wheels of 1897 and 1898 which has caused much dissatisfaction among a great many bicyclists, women particularly, seems likely to be as objectionable in the coming wheels as in those of the past. It is alleged that the new wheels will be heavier, if anything, than those of the present year. It is not known exactly what the machines of the '99 pattern will weigh; but if accounts are true, they will be 1 pound, and perhaps 2 pounds, heavier than the wheels of to-day.

At first thought, a difference of 1 or 2 pounds in the weight of a bicycle may seem too trivial a matter for serious consideration; and, indeed, to riders of muscular build it is. But many cyclists are not Sandows. They look upon a 30-pound bicycle to-day as they did seven years ago upon one of almost twice that weight. Light-weight bicycles are admitted by all to be less staunch and rigid for ordinary road use than are those of medium weight; but, nevertheless, the tests withstood by the former have been sufficiently creditable to make light wheels acceptable to a large part of the cycling fraternity.

MARKET FOR CATTLE AND HORSES IN CANADA.

From observations in this Province, I am led to believe that there is a field here for the importation of well-bred horses, cattle, and sheep from the United States.

The horses in this vicinity are nearly all undersized and very poorly bred. Good driving horses are very scarce, and good draft horses seem to be almost unknown. It seems to me there is a chance for the importation into British Columbia of a considerable number of stallions of good blood, to be used to improve the native stock. It is also probable that a market could be found here for a limited number of well-bred brood mares, if the prices were reasonable. I understand that animals imported for breeding purposes can be brought in duty free under proper customs supervision.

The cattle I have seen here, with a few noteworthy exceptions, are not generally of the best breed. This should afford a market for the higher bred stock. I think a few shorthorns and Jersey bulls could be sold or used to the profit of the importer. Probably both cows and bulls of these and other good breeds could be sold in limited quantities.

This country of hills and valleys would seem to be well adapted to the breeding of sheep, though I have seen only one small flock in my visits through the Province. The only suggestion I have heard unfavorable to sheep raising is that the climate on the western side of the mountains is very humid, owing to the great rainfall in that region; yet the one thriving flock I saw was in the heart of the wet district. The atmosphere east of the mountains is freer from moisture. It seems to me that there is a fair opportunity for some enterprising stock raiser to bring into this Province some high-class stock. I believe he would find a good market.

Not being an expert in these matters, I hope that no one will act upon the suggestions I have made without full investigation, which I shall be glad to facilitate so far as lies in my power.

In confirmation of what I have said, I respectfully invite attention to the inclosed article, which appeared as an editorial in the Evening World of this city August 5.

L. EDWIN DUDLEY,

VANCOUVER, *August 6, 1898.* *Consul.*

It was thought by many—and there seemed good ground for such conclusions—that with the introduction of electricity and modern machinery the day for the profitable raising of horses might almost be classed as past. Before the introduction of the electric street car, horses for use on the street railways were in great demand.

Those required for this purpose were what might be called a second grade, as but few high-class animals were used. A ready market was therefore found for a class of horses which are now a drug on the market. But the price of first-class ones in the coach and draft classes was always good, and dealers report a great scarcity of those in eastern Canada. It is with difficulty that a decent shipment can be collected, simply because the country has been drained of its best material; and the great majority of farmers have stopped breeding them, thinking that because there has been almost no market for second-grade horses for a few years, it was not profitable to raise any at all. Those who followed the rule which should be the guiding one as regards all kinds of stock, namely, to raise nothing but an A1 article, are now reaping the benefit. There are plenty of horses in British Columbia; but the large majority are of the wrong grade, and consequently would not be looked at for supplying the best markets. Many of the range horses make suitable farm or pack animals, but they are under size and poorly bred. What the Province wants in this line is the introduction of more pure-bred sires to improve the native stock, and there is no reason why this should not be made a very profitable source of income.

CANADIAN CHEESE.

While a perusal of the report furnished by Consul Dickinson, of Nottingham, England,* regarding the importation of cheese into the United Kingdom discloses facts of great interest to our manufacturers, a study of this leading dairy industry of Canada shows some additional facts, which tend to further explain the discrepancy referred to by Consul Dickinson, viz, that of the total importations of cheese into the United Kingdom in 1897, 58 per cent came from Canada, while only 24 per cent came from the United States.

It must be understood that Canada manufactures her cheese largely for export, 90 per cent of her entire yearly output being disposed of in the United Kingdom; and her manufacturers have long since realized the necessity of making a prime uniform article to meet the special demands of that market. To do this, they have thoroughly organized, and through their organization they control the quality intended for export. They have been aided largely in this by instructors appointed by the Dominion and provincial governments, who regularly visit the different factories and superintend the manufacture, thereby insuring a uniform product. The organization in Ontario consists of the eastern and western associations, and all the factories belong to one or the other of these. Then there are minor district associations to which all the factories in that district belong. These associations are presided over by a president and secretary, and a record is kept of all transactions pertaining to the industry. Their manner of placing their product upon the market also tends to control the quality of the output, as well as to bring the producer and exporter into closer touch, besides enabling the

*See CONSULAR REPORTS No. 212 (May, 1898), p. 109.

manufacturer to obtain the highest price as based upon the latest market report.

A method which, I believe, is generally adhered to throughout the Province of Ontario is as follows: Each district or subassociation holds a weekly market, at which market any factory in that district may advertise the number of boxes of cheese it has for sale, stating the color and age. The boxes are then and there sold to the highest bidder; and no cheese is bought or sold and no negotiations of any kind are entered into relating to the purchase or sale of cheese on market day, except in public competition under this system. There are eighteen such associations in the Province of Ontario, representing one thousand two hundred and six factories, with an annual output of more than 100,000,000 pounds.

HENRY S. CULVER,

LONDON, ONTARIO, *July 25, 1898.* *Consul.*

CANNED MEATS IN MADAGASCAR.

In reply to an inquiry from a Chicago firm, Consul Gibbs writes from Tamatave, June 2, 1898:

It is only recently that canned meats have been on sale here. The French manner of canning a variety of edibles is somewhat different from ours, meat being the chief component part. There is an active demand for this article in the local market, and there is a considerable supply of canned ham, English brawn, labeled "Armour & Co.," and casks of corned beef and pickled pork, also said to be American products. English canned meats are also to be had, consisting of Oxford sausages, retailing at 1.75 francs (34 cents) each; lunch sheep's tongues, at 3 francs (57 cents); preserved ox tongues, at 4 francs (77 cents) each; curried brawn, at 1.25 francs (24 cents), etc. The cans labeled "Armour & Co." sell at: Ham, 1.75 francs (34 cents); English brawn, 1.50 francs (28 cents); corned beef, from cask, 18 cents per pound; pickled pork, 19 cents per pound.

The freight charges on such articles coming from English and American ports are $8 per ton.

The customs duties on such goods coming into the port of Tamatave are: Canned meats, $4 per 200 kilograms (440.92 pounds); casks of corned beef, $6 per 200 kilograms; pickled pork, $5 per 200 kilograms. In addition, there is a municipal tax of 1 per cent on net cost. French goods are free.

The annual importation of these goods into this port is approximately as follows: English, about 400 dozen tins; French, about 800

or 1,000 dozen tins; American, about 400 dozen tins; and corned beef and pickled pork, about 150 casks.

The merchants handling these goods at Tamatave are: Messrs. Chan, Ming & Co., Ajan Tank Wen & Co., Chan Soon, Chan Weng, Proctor Bros., I. Dupuy, A. Dupré, Rébut & Sarraute.

The consumption of such products is dependent largely on the foreign population. There is some doubt in my mind as to whether canned meats can be successfully placed on this market, unless they are sausage meat, ham, bacon, and brawn, and such fancy varieties as those packed and exported by Felix Potin, of Paris. It is obvious that it is no easy matter to successfully compete with French canned meats in this market, since the latter are exempt from customs duties.

JAPANESE HARBOR REGULATIONS FOR OPEN PORTS.

Minister Buck transmits from Tokyo, under date of July 15, 1898, official translation (in print) of the new harbor regulations promulgated by imperial ordinance, as follows:

HARBOR REGULATIONS FOR THE OPEN PORTS.

ARTICLE I.

The limits of the undermentioned ports open to foreign commerce are defined as follows:

At Yokohama: The harbor limits are comprised within a line drawn from the Juniten (Mandarin Bluff) to the light-ship and thence due north to a point on the coast east of the mouth of the Tsurumigawa.

At Kobé: The harbor limits are comprised within the area bounded by two lines, one drawn from the former mouth of the Ikutagawa due south and the other running in a northeasterly direction from the point of Wadanomisaki.

At Niigata: The harbor limits are comprised within the arc of a circle, the center being the light-house and the radius being 2½ nautical miles.

At Ebisuminato: The harbor limits are comprised within a line drawn from Shiidomarimura to Tsori-mura on the outside and a line drawn from Minatocho, the east shore of Lake Kamo, to Kamomura, on the northwest shore of the same on lake.

At Osaka: The harbor limits are comprised within a line drawn from Tree Point, at the mouth of the Mukogawa, south by west and a line from the mouth of the Yamatogawa, the two lines cutting each other at a distance of 6 nautical miles from Tree Point and 5 nautical miles from the mouth of the Yamatogawa.

At Nagasaki: The harbor limits are comprised within a line drawn from Kanzaki to Megami.

At Hakodate: The harbor limits are comprised within a line drawn from a point off the coast one-half nautical mile south of Anama Point, to a point on the east bank of the mouth of the Arikawa, Kami-isomura.

ARTICLE II.

Every vessel on entering a port shall hoist its ensign and its signal letters.

Regular mail packets may hoist the company's flag in lieu of the signal letters.

The ensign and signal letters or flag must not be lowered until the vessel's arrival shall have been duly reported to the harbor master.

Such report shall be made within twenty-four hours after arrival, Sundays and holidays excepted, and no customs facilities shall be extended to any vessel until such report shall have been made.

ARTICLE III.

Every master on arrival in port shall prevent all communication between his ship and other vessels or the shore until it shall have been admitted to "free pratique."

ARTICLE IV.

The harbor master's boat will be in attendance near the entrance of the harbor, and the harbor master will assign a berth to every ship on entering, which berth it must not leave without special permission, unless forced to do so. The harbor master may cause a vessel to change its berth, should he consider it necessary.

ARTICLE V.

The harbor master shall always wear a uniform when on duty, and his boat shall carry a flag of the pattern hereto annexed.

The harbor master may, at any time, satisfy himself that his directions as regards anchorage, the movements of ships, and the proper condition of moorings are carried out.

ARTICLE VI.

No vessel shall anchor in the public fairway or otherwise obstruct free navigation. Vessels which have run out jib-booms shall rig them in at the request of the harbor master if they obstruct free navigation.

ARTICLE VII.

Every vessel either at anchor or under weigh within harbor limits shall carry, between sunset and sunrise, the lights required by the regulations for the prevention of collisions at sea.

ARTICLE VIII.

When bad weather threatens or warning signals are exhibited, vessels shall immediately get ready one or more reserve anchors; and steamships shall, in addition, get up steam.

ARTICLE IX.

Any vessel carrying explosives or highly inflammable materials in excess of ordinary requirements shall come to outside the harbor limits and there await the harbor master's orders. Such vessels while so waiting shall, between sunrise and sunset, fly at the foremast head the signal letter "B," and between sunset and sunrise shall hoist in the same place a red lantern.

No vessel shall ship or discharge any such materials except at such places as the harbor master may indicate.

ARTICLE X.

Every ship which is laid up or undergoing repairs, and all yachts, storeships, lighters, boats, etc., shall be moored in special berths designated by the harbor master.

ARTICLE XI.

In case of fire breaking out on board a ship within harbor limits, the ship's bell shall be rung until the arrival of assistance, and the signal letters "N M" shall be hoisted between sunrise and sunset, or a red lantern shall be continuously hoisted and lowered between sunset and sunrise.

If police assistance be required, the signal letter "G" shall be hoisted between sunrise and sunset, and between sunset and sunrise blue or flash lights shall be shown.

All discharging of firearms or letting off of fireworks within the harbor limits is forbidden without permission from the harbor master, except in such cases as above mentioned for the purpose of signaling.

ARTICLE XII.

Any vessel arriving from a place which has been declared by an official declaration of the Imperial Government as being infected with an epidemic or contagious disease (such as cholera, smallpox, yellow fever, scarlet fever, pest), or on board of which any such disease shall have occurred during the voyage, shall come to outside harbor limits and shall hoist a yellow flag at the foremast head between sunrise and sunset, and shall show a red and a white light, one above the other, in the same place between sunset and sunrise. Such vessel must undergo inspection by the proper sanitary authorities.

The sanitary authorities shall, on approaching the vessel, be informed whether any cases of any such diseases have actually occurred during the voyage, and the nature of such diseases, in order that suitable precautions may be taken.

The said ship must not lower the yellow flag or the above-mentioned lights until it shall have been admitted to "free pratique;" neither shall any person land from it, nor shall any communication be held with other ships without the permission of the proper sanitary authorities.

The provisions of the preceding paragraphs apply to vessels anchored within harbor limits on board of which any of the above-mentioned epidemic or contagious diseases have broken out.

Such vessels must change their berth on receiving an order to that effect from the harbor master.

Any vessel arriving from a place infected with cattle disease or on board of which such disease has broken out during the voyage, shall not land or tranship either the cattle, their dead bodies, skins, hides, or bones, without the permission of the proper sanitary authorities.

ARTICLE XIII.

No carcasses, ballast, ashes, sweepings, etc., shall be thrown overboard within harbor limits.

While taking in or discharging coal, ballast, or other similar materials, the necessary precautions shall be taken to prevent their falling into the sea.

If any materials detrimental to the harbor shall have been thrown into the sea or shall have been allowed to fall in through negligence by any ship, they shall be removed by the ship upon receipt of an order to that effect from the harbor master; and if not so removed, the harbor master may cause them to be removed at the ship's expense.

ARTICLE XIV.

Any ship intending to leave port shall give notice at the harbor master's office and hoist the Blue Peter.

Steamers which have fixed dates of departure need only make one declaration for their arrival and departure.

ARTICLE XV.

All wreckage or other substances which obstruct the public fairway in a harbor or its approaches must be removed by their owner within the time indicated by the harbor master. If this order is not complied with within the time specified by the harbor master, the harbor master may cause them to be removed or destroyed at the owner's expense.

ARTICLE XVI.

A suitable and sufficient number of buoy moorings for regular mail steamers shall be provided by the harbor master's office. A prescribed fee shall be charged for the use of such moorings.

ARTICLE XVII.

No chains, ropes, or other gear shall be attached to any light-ship, signal buoy, or beacon.

Any vessel running foul of or damaging a light-ship, buoy, beacon, jetty, or any other structure shall pay the necessary expenses for repairs or replacement.

ARTICLE XVIII.

Any infringement of the provisions of the present regulations shall render the offender liable to a fine of not less than 2 yen (99 cents) and not exceeding 200 yen ($99.60).

ARTICLE XIX.

The master of a vessel shall also be held responsible for any fines, fees, or expenses which may be imposed or charged on or in respect of the vessel.

ARTICLE XX.

No vessel shall be allowed to depart until all fines, fees, and expenses imposed or charged under these regulations shall have been paid, or until security therefor to the satisfaction of the harbor master shall have been deposited with the harbor master.

ARTICLE XXI.

The word "harbor master" as used in these regulations is also meant to include the harbor master's assistants and deputies; and by the word "master" is meant any person in command of, or having the direction of, a ship, whatever his designation may be; and by the word "port" or "harbor," is meant one of the ports or harbors enumerated in Article I of these regulations.

ARTICLE XXII.

A portion of each harbor shall be reserved as a man-of-war anchorage.

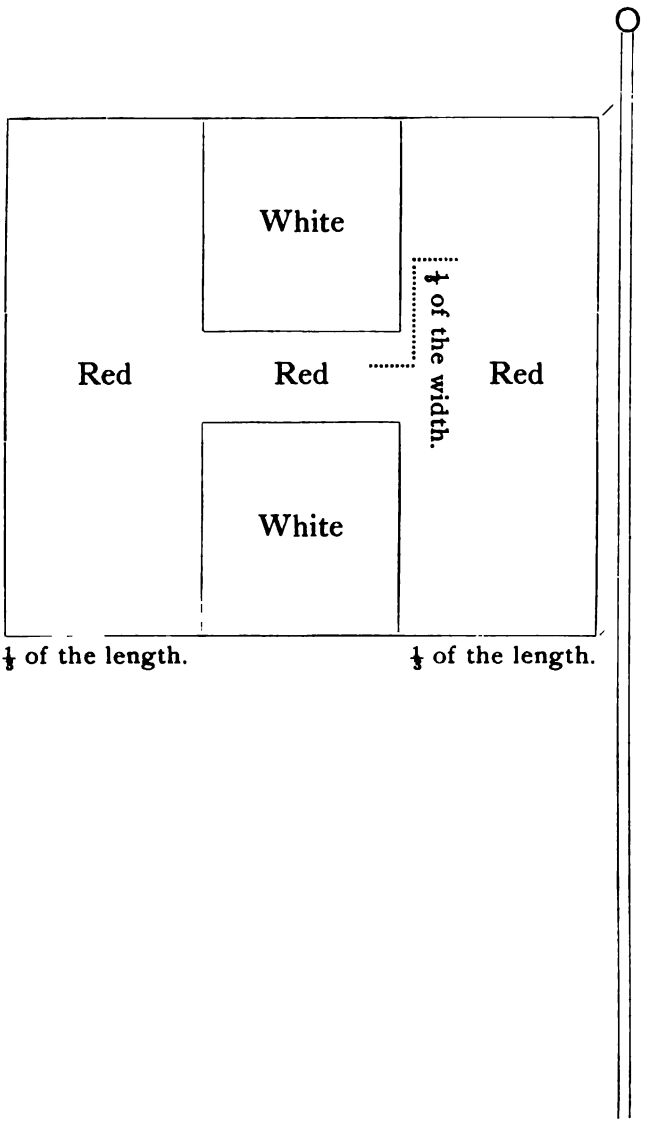
ARTICLE XXIII.

The only provisions in these regulations which shall apply to men-of-war are those contained in Articles IV, VI, XII, and XXI, and in the first and second paragraphs of Article XIII.

ARTICLE XXIV.

The time when, and the localities where, these regulations are to come into operation, shall be notified by the Minister of Communications. The Minister of Communications shall also issue detailed rules for the due enforcement of these regulations.

Flag prescribed in Article V.



ELECTRIC RAILWAYS IN SHANGHAI.

Consul-General Goodnow, of Shanghai, under date of July 9, 1898, says:

I inclose a clipping from the published report of the proceedings of the city council with reference to the proposed street railway in Shanghai. This plan contemplates about 18 miles of railway of the overhead wire and trolley system. It appears to me that our electric railway builders should bid for this concession. The extract reads:

The report of the special commission is again under discussion, and it is decided to include in the particulars both systems of gauge ("standard" and "meter").

The following general particulars are ordered for publication:

The electric overhead trolley system is to be adopted.

The routes are to be three in number, viz:

(1) From the French waterworks along the Chinese Bund (if practicable), and thence along the French and English Bunds, to the point by way of Broadway, Seward, and Yangtzepoo roads.

(2) From the Bund to the Bubbling Well, by way or the Kiukiang, Kiangse, Hankau, and Nankin roads.

(3) From the Shanghai Station of the Woosung–Shanghai Railway to the west gate of the Chinese city.

A concession is to be given for the construction of the line and all accessories to a syndicate or company, to be known as the "Shanghai Tramway Company." The concession is to be for thirty, forty, or fifty years, according to the tender that the ratepayers may decide to accept, and the company is to pay the council a percentage of the total gross receipts for the period of the concession.

Notification to tenderers by public advertisement will follow in due course, and the tender finally selected will be submitted to the ratepayers for ratification.

MINING AND RAILWAY CONCESSIONS IN CHINA.

Several important contracts relating to the development of China have recently been entered into by the Chinese Government.

A contract has been made by the Russo-Chinese Bank for a railway, 140 miles long, from Tai-yu-an-fu, the capital of Shansi province, to Cheng-ting-fu in the province of Chihli, the first large city south of Pao-ting-fu, the capital of Chihli. Pao-ting-fu is on the trunk line from Hankau to Pekin. This contract also includes mining privileges and the building of necessary branch roads.

A contract has been granted to Mr. Luzatti, agent of an Anglo-Italian syndicate, for working coal, iron, and petroleum throughout central and southern Shansi, with the privilege of building railways and cutting canals to join trunk lines or navigable rivers. The con-

tract runs for a period of sixty years, and is entirely vested in the Anglo-Italian syndicate.

This is the greatest industrial concession ever made by China. The engineers and staff are to be composed of English and American engineers. Two American engineers—Messrs. Jameson and Shockley—have visited Shansi, and they report that the minerals are inexhaustible and as yet almost untouched.

I have been credibly informed that the Hankau–Canton line has been granted to an American syndicate, but I doubt whether they have the Hankau–Pekin line. A contract has also been granted an American—Mr. H. H. Lowry—to operate, in conjunction with a Chinese company, the coal mines west of the city, and to build a railroad to Kalgan, conditioned on the raising of 10,000,000 taels* ($6,730,000).

CHARLES DENBY,
Minister.

PEKIN, *June 16, 1898.*

REGULATIONS FOR INLAND NAVIGATION IN CHINA.

I inclose a translation of a note received from the Tsungli Yamên, dated the 3d instant, together with a translation of the inland steam navigation regulations, which were transmitted with and are referred to in the note. From information received, it was anticipated that these regulations would be modified, and for that reason they have been withheld for a short time.

CHARLES DENBY,
Minister.

PEKIN, *June 21, 1898.*

THE TSUNGLI YAMÊN TO MR. DENBY.

PEKIN, *June 3, 1898.*

YOUR EXCELLENCY: The Prince and Ministers have the honor to state that ever since China entered into commercial relations with foreign powers, steamers have been running at their pleasure to the coast and river treaty ports. The result is that trade has daily increased. Steamers, however, have hitherto never been permitted to run on the inland rivers.

Soochow and Hangchow have in recent years been opened as treaty ports, and native craft plying to and from these ports carrying passengers and merchandise have for the most part been towed by steamers. This is in every way a convenient and expeditious system. Both Chinese and foreign merchants have requested that companies be formed and vessels built to ply to various ports. It seems therefore right to do what is suitable for the occasion and make such changes as will redound to the utmost benefit of the interests concerned.

---

* It is presumed that the haikwan tael is meant, and the reduction is made according to the estimate, April 1, 1898, of the United States Director of the Mint.

The Yamên have now decided to allow small steamers, foreign or Chinese, to ply on the inland rivers in the provinces where commercial intercourse with foreign nations is carried on, in the hope that trade will thereby expand and the revenue be increased.

In obedience to instructions, the inspector-general of customs has drawn up and submitted a set of rules, nine in all, to be put in operation. These have been carefully examined and can be put in force experimentally.

The Yamên memoralized the Emperor on the subject and received His Majesty's decree to put the rules into operation. The Yamên have also addressed the ministers superintendent of northern and southern trade, the viceroys, governors, tartar-generals, lieutenant-generals, and have also instructed the inspector-general of customs, the custom taotais, and the superintendent of customs at Canton, to act accordingly.

As in duty bound, the Prince and Ministers send a copy of the rules drawn up by the inspector-general of customs and beg that the minister of the United States will instruct the United States consuls in China to notify American merchants that they must duly observe them. It is to be hoped that, in future, the trade of Chinese and of foreigners will increase and that this source of revenue to China will not be interfered with.

INLAND STEAM NAVIGATION REGULATIONS OF 1898.

A.—Registration.

(1) The inland waters of the treaty-port provinces are hereby opened to small steamers, native or foreign, plying from treaty ports.

(2) Small steamers at treaty ports, whether plying only in the waters of the port or going thence inland, are to be registered at the customs and to take out papers at the customs containing owner's name and residence, name and type of steamer, number, crew, etc., in addition to whatever national papers they are allowed or required by law to carry. Such customs papers are to be renewed annually, and are to be surrendered on change of ownership or when the vessel ceases to ply. The fee for the first issue of customs papers will be 10 taels,* and for each renewal 2 taels.

(3) Small steamers thus registered at the customs may ply freely in the waters of the port without reporting their movements at the customs; but if they go inland, they must report both departure and return. No unregistered steamer will be allowed to proceed inland.

(4) As regards exhibition of lights, prevention of collision, shipping of crews, and inspection of machinery, etc., all such steamers are to observe the rules in force at the ports to which they belong.

B.—Revenue.

(5) Cargo shipped at treaty ports is to be reported to the customs and is to pay such duties as the customs decide to be leviable. Cargo brought to a treaty port from inland is to be summarily dealt with.

(6) Cargo landed or shipped inland is to pay at the place of landing or shipment whatever dues or duties the local regulations call for.

(7) If such steamers have vessels in tow, they must halt at whatever stations the vessels towed are required to stop, in order that the cargoes may be dealt with as local rules prescribe.

---

* The Director of the United States Mint, April 1, 1898, values the haikwan tael at 67.3 cents.

C.—Judicial.

(8) Offenses inland, whether against revenue laws or affecting persons or property, are to be dealt with by the local authorities of the district in the same way as if there committed by their own people; but, if the vessel concerned is foreign owned, or the person implicated is a Chinese employed on board such foreign-owned vessel, the local authorities are to communicate with the nearest commissioner of customs, and the commissioner in turn with the consul, who may send a deputy to watch the proceedings. If the offender is a foreigner, he is to be sent to the consul at the nearest treaty port, in the manner prescribed by treaties where foreigners without passports are arrested.

(9) If any such steamer passes inland stations where a stop should be made, without stopping, or if the crew, etc., creates trouble inland, the customs may withdraw the customs papers and refuse the vessel permission to proceed inland again.

The above rules are for the inauguration of steam traffic on inland waters, and are subject to such changes as may from time to time be found necessary.

WATCH TRADE IN JAPAN.

The following is from a report of the Swiss consul-general at Yokohama, on the export of Swiss and American watches and watch materials to Japan. Great stress is laid on the fact that the United States exporters of watch materials are still getting the lion's share. In 1896, Switzerland exported a sum equal to that of the United States; but, in 1897, our exports gained, the reason given being that either greater push was displayed by the American competitor or that there was a considerable reduction in prices. While the United States takes the lead in the export of watch parts and materials, Switzerland is far ahead in the export of complete watches. The consul-general also reports that the Osaka Watch Company has discharged its American superintendent and all its American workmen. Other facts stated in the report are of great interest to the American watch trade.

REPORT BY CONSUL-GENERAL RITTER, OF SWITZERLAND.

[Translation.]

The watch trade of the year 1897 was as profitable as that of 1896. Imports gained 2 per cent, and the decrease in number of pieces was 12 per cent less than last year, thereby raising the average price 14½ per cent—the reason for this being obviously that better watches were imported. The kinds of watches imported were: Gold cases, 3½ per cent; gold-plated cases, 2 per cent; silver-plated cases, 71½ per cent; composition cases, 21½ per cent; and steel-plated cases, 1½ per cent—of the total amount.

Key-winding watches are unsalable. As a general rule, the smaller sizes are desired. In former times, the 21‴, 22‴, 23‴, and a few 24‴ were the salable sizes; but now only 19‴, 20‴, 21‴, and a very few 22‴ and 18‴ are the sizes desired, while 23‴ and 24‴ find no buyers when offered even at a loss.

The change of fashion has enabled a number of Japanese manufacturers to enter the field who were not equipped to furnish the larger sizes formerly demanded.

The great variety in styles increases the trade and should be of benefit to those Swiss manufacturers who make specialties; but it must be remembered that this market requires a chronograph dial even for the cheapest metal watch, contrary to European style. The trade in ladies' watches is small.

Gold-plated watches from the United States have as great a sale as ever, and can only be sold in model and style as produced there. Watches in steel cases figure for the first time this year, about 4,000 having been sold during the last fiscal year. If the wearing quality is such that the black case will retain its color for a considerable time, its use, no doubt, will largely increase.

Following are statistics for the past five years, which show that Switzerland has kept its lead above all countries in the export of complete watches to Japan:

Japanese import of watches.

Country.	Complete watches.				
	1897.	1896.	1895.*	1894.*	1893.
	Pieces.	*Pieces.*	*Pieces.*	*Pieces.*	*Pieces.*
Switzerland	274,103	307,991	161,198	60,266	86,713
Germany	5,379	13,539	7,701	11,694	3,694
France	7,800	4,620	9,358	3,238	10,243
United States	18,469	22,627	9,002	2,972	2,406
Great Britain	140	26	704	102	691
Other countries	3	12	759	.....	.....
Total	305,894	348,815	188,722	78,272	103,747
Share of Switzerland	89 per ct.	88 per ct.	86 per ct.	77 per ct.	83 per ct.

Country.	Value.†				
	1897.	1896.	1895.*	1894.*	1893.
Switzerland	$829,048	$884,946	$399,468	$195,627	$301,528
Germany	5,838	13,492	8,231	7,026	2,633
France	18,369	10,199	20,681	8,725	26,965
United States	111,364	100,586	29,832	13,193	13,269
Great Britain	1,499	1,104	4,802	412	1,392
Other countries	3	80	1,958	.....	.....
Total	966,121	1,010,407	464,972	224,983	345,787
Share of Switzerland	87 per ct.	87 per ct.	86 per ct.	87 per ct.	85 per ct.

* Years of war.

† Reductions to United States currency made in the Bureau of Foreign Commerce.

It may be remarked that in this table, as in former statistics, Germany is credited with a large number of cheap alarm clocks under the name of watches, which would reduce the average price per watch from $1.05 to about 53 cents. The watch import, as distributed among the different ports of entry, was as follows for the year 1897:

Port.	Pieces.	Value.
Yokohama	210,885	$694,656
Kobé	94,823	256,741
Nagasaki	186	774

Since last year, the factory at Osaka has imported movements and rough 16''' cases from the United States, to be finished here after American models; but experience has shown that this product is higher in cost and lacks the finish of the complete American article. The shares of the company, in consequence of bad business, have fallen steadily. The output in the last fiscal year was about 2,500, and only some 10,000 have been produced since its opening. At present the factory stands idle.

In my former report, I spoke of the new factory at Tokyo, superintended by Japanese who learned their trade in Switzerland. Up to this time, the machines are still incomplete. There is a 5-horsepower engine, a machine for stamping cases, and a few lathes for the production of pivots, wheels, screws, etc. Although it has been in existence for four years, it has not been able to produce a single complete watch, and is to be considered little more than a horological school, with twenty young workmen as scholars. It is said that this factory will follow in the footsteps of the Osaka factory by importing parts, which again will raise the price of watches, as such articles come under the extra duty on luxuries, at 25 per cent ad valorem. I may therefore express the hope that from this side no competition is to be feared by the Swiss manufacturers.

It is of importance to note that both factories employ only Japanese. The Osaka Watch Company has discharged the American superintendent and all its American workmen.

The results of the Japanese watch industry can best be shown by the following table for the last five years, showing the value of the import of materials as compared with the import of complete watches:

Year.	Watches.	Watch parts.
1897	$966,121	$44,821
1896	1,010,408	52,819
1895	464,972	24,641
1894	224,985	15,885
1893	345,786	13,426

This table shows that in the year 1893, when there was no watch factory in Japan, the value of the parts of watches imported was only 3.88 per cent of the value of the import of complete watches. In the year 1894, when the watch factory in Osaka was opened, the percentage of the watch parts imported reached 7.08 per cent of the same and has declined ever since. In the fiscal year 1897, it had fallen to 4.64 per cent, 0.76 per cent more than in 1893. If we assume that the 3.88 per cent of watch parts imported in the year 1893 was sufficient to repair the imported watches of the same period, we find in the increase of 0.76 per cent of the year 1897 the actual consumption of the Japanese watch manufactories.

The United States has the lion's share of the import of watch parts. It furnishes everything used by the Osaka factory, which produces only American watches. In 1897, the United States export to Japan was $25,994, compared with the Swiss export of only $9,663. As the Osaka factory can hardly use one-third of the United States export, these figures show conclusively that the United States furnishes more materials for the repair of Swiss watches than does Switzerland itself. The import of the number of United States watches is only 6¾ per cent of that of Switzerland, but the value of the same is 13½ per cent of the value of the Swiss import. In this connection, it is worthy of note that in the year 1896 the difference between the import from the United States and Switzerland was merely nominal: United States, $24,361; Switzerland, $25,491.

When, therefore, in the year 1896 Switzerland could hold its own against the United States and could no longer do so in 1897, it must be concluded that the manufacturers of the United States sell cheaper, or are more energetic than their Swiss competitors.

ADOLPH L. FRANKENTHAL,
Consul.

BERNE, *July 12, 1898.*

QUININE IN JAVA.

Although for some years Java has been the principal country for producing cinchona bark, yet the actual manufacture of sulphate of quinine here has only just begun; it nevertheless, I think, deserves a passing notice.

My attention was first called to the matter by an invoice being brought to me on January 18, to be certified for a shipment to the United States, of 10,000 ounces of sulphate of quinine. This is the first shipment on record and marks the beginning of a new and, I hope, very profitable era in the trade relations between Java and the United States.

Since then, there have been other shipments, and up to the present date there have been shipped, or rather invoiced for shipment, to the United States, 48,300 ounces of sulphate of quinine, valued at $11,395.55; and I have every belief that more will follow.

There is at present only one factory for working the cinchona bark in Java, and it has been running a very short time; but, in spite of drawbacks, its owners are full of energy, and the success of the enterprise is probable.

Just now things look especially bright, as the war has resulted in a rise in quinine quotations. Quinine from this factory (Bandoengsche Kinine-fabrick), which the latter part of April was at $6.15 per unit,* had risen by the middle of May to $7.54.

I think I can best describe the industry, its history and its prospects, by inclosing a letter written by Mr. F. W. Sijthoff, the manager of the factory above mentioned, who has been very courteous and has offered me every facility for acquiring information. He describes matters better and more graphically than I could.

As regards the cultivation of the cinchona bark, the result of the Government plantations here does not bear out the common opinion that commercial ventures are better managed by private enterprise. An official report just published shows that the Government in 1896

* The unit of quinine means the percentage of sulphate of quinine in half a kilogram (1.10 pounds) of cinchona bark; thus, bark yielding 1 per cent with the unit price 4 cents would bring 4 cents per half kilogram, while bark yielding 5 per cent of sulphate of quinine would bring 20 cents per half kilogram.

cleared a profit of over $38,500 from its cinchona estates, while the same year was, as a rule, a very poor one for planters, owing, Mr. Sijthoff says, to the manipulations of a particularly unscrupulous European trust.

I can not conceive of a better investment than the planting of cinchona in Java. The shortage in production in a few years will be very large, and prices will take a big jump. Concessions of land are not hard to get here if one is on the spot, and the climate of the interior of Java is as perfect as that of the coast cities is bad.

SIDNEY B. EVERETT,

BATAVIA, *June 17, 1898.* *Consul.*

EXTRACTS FROM THE LETTER OF MR. SIJTHOFF TO MR. EVERETT.

I shall gladly give you the information requested. At first it was claimed that no quinine could be made in the Tropics, and that, even in case we could make quinine, we could never sell it, because the quinine trade was entirely in the hands of the manufacturers in Europe.

The first year was for us one of adversity and disappointment; now we have not only succeeded in delivering a good product, but can sell it to advantage, the demand increasing constantly.

Our factory is now producing 90 to 100 kilograms (198 to 220 pounds) of quinine a day, which is sent to America, England, Amsterdam, Straits Settlements, Hongkong, Japan, and Australia.

For a few years after cinchona plantations were laid out in Java, fabulous profits were made. Ceylon transformed all its bad coffee enterprises into cinchona plantations, with the result that the production kept pace with the consumption and prices declined. When the Ceylon plantations were seven to nine years old, it appeared that the soil and climate of that island were not good for the tree. After 1894, Ceylon was entirely exhausted, and the production fell off very sharply. A trust that had been formed in the meantime, and that had already fixed a price for manufactured quinine, fixed also the price of cinchona bark. Thus quinine planters, although coming to the market with a moderate crop and one not satisfying the consumption, always got inferior prices for their product.

Our factory buys no bark and carries on no trade in it, still less in quinine. We work the bark for a commission of 7 florins per kilogram ($2.81 per 2.2046 pounds) of quinine, the actual proceeds of the finished product going to the planter.

Just now the production is considerably short, so that the deficiency is made up from the stock of quinine on hand and bark of very bad quality which has already been lying piled up for twenty years. In another two or three years these stocks will be entirely used up, and the world will have to face a shortage of quinine.

I am firmly and sincerely convinced that now is the time to begin a new quinine enterprise, which, with the benefit of a long experience, will be a model estate and yield in a few years great profits.

Mr. England, in the Chemist and Druggist, says that North America in 1897 imported in cinchona bark and quinine 10,000,000 ounces of sulphate of quinine. The rest of the world needs some also; let us say 300,000 kilograms (661,380 pounds), which makes the total 585,000 kilograms (12,896,910 pounds). The world's output is only 385,000 kilograms (788,771 pounds), of which Java produces about three-fourths.

When Africa and China are opened up, the consumption will naturally increase, especially in the latter country with its 460,000,000 inhabitants.

Java has attained its highest crop yield, and it will be some years before we can expect any satisfactory enterprises to be undertaken.

The quinine made by American houses comes from bark which is first sent from Java to Amsterdam for sale and then shipped over to the United States. We certainly could produce satisfactory raw quinine for use in America, which would make that country entirely independent of Europe. The transportation of the crude quinine would be simpler and less costly.

CIGARETTES IN KOREA.

Having been asked by cigarette manufacturers in the United States for certain data regarding the cigarette trade in Korea, I have collected all the information available on the subject and send it in this form to the Department for general use.

The Koreans are great smokers. Both sexes and all classes begin smoking early in life and keep it up most diligently. Tobacco is not used by them in any other method than smoking. The pipe is the constant companion of every Korean man and woman. However poor an individual may be, there always seems to be some method of obtaining tobacco for the pipe which he or she is sure to possess, whatever else may be lacking.

The tobacco used by Koreans is almost entirely home grown. Every farmer or gardener has his little patch of tobacco, much of which is very good in quality, but is injured in curing, being simply hung up under the wide eaves of the houses to dry. It is quite strong. The supply seems to be ample, and the price is very low. No leaf tobacco is imported.

The Korean pipe is a brass bowl of fair size, with a brass mouthpiece. These are connected by a hollow reed stem of from 1 to 4 feet in length, some of these stems being beautifully ornamented and all neat and light. The common people use shorter pipes for convenience in working, but all who can affect the long pipe, both for coolness and for looks. The mouthpieces are often made of jade, amber, or other costly material; and of late, mouthpieces of clouded glass are offered for sale at such cheap rates as to make them more or less popular.

The long pipe can be smoked with comfort only when the smoker is sitting down. Accidents often occur from persons falling with a long pipe in the mouth, the stem of which is driven down the throat, through the cheek, or into the soft palate.

During the reform period that followed the Japan-China war, an order was issued forbidding the use of the long pipe by the common

people. Many short foreign pipes were sold thereafter, and the use of the cigarette became very common. This order is now practically a dead letter, and the long pipe is reinstated again; but cigarettes have become so popular, because of their convenience, that they will probably never be given up, but will increase steadily in favor.

Native cigarettes of the poorest quality are made and sold for something like 1 cent gold for twenty. Little cigars of about the size of a cigarette are also made and sold for 28 cents silver (14 cents gold) per one hundred.

The most popular foreign-made cigarettes now in use in Korea seem to be brands like the "Ohayo," made in Japan, it is said, of American tobacco, but probably of a mixture of Japanese and American. These sell in Korea for $50 silver ($25 gold) per case of twenty thousand and retail for 3 cents silver (1½ cents gold) per package of ten, with mouthpieces.

A cigarette made by machinery in Shanghai, of American tobacco, and called "Little Sweetheart" is meeting with considerable sale here. They sell in Korea for $170 silver ($85 gold) per case of fifty thousand and retail for 4 cents silver (2 cents gold) per package of ten.

American cigarettes are used exclusively at the palace, where large quantities are consumed. This makes them popular also with the higher classes. They are kept on sale in the local Chinese shops, and the best retail for 40 cents silver (20 cents gold) per package of twenty. The most popular brands are called "Straight Cut," "Sweet Caporal," "Old Gold," "Pin Head," etc. Some English cigarettes are now to be found in the shops, and Russian and Egyptian brands are kept for the consumption of the European population.

The import duty on cigars and cigarettes is 20 per cent ad valorem.

The import of cigars and cigarettes, chiefly the latter, in 1896, amounted to $57,112 silver, or $28,556 gold. In 1897, it was $89,206 silver, or $44,603 gold. The import for 1898, it is thought, will show a marked increase on these figures.

American cigarettes are chiefly imported by the American firm of Townsend & Co., Chemulpo. I hear that a German firm—E. Meyer & Co.—is about to handle American cigarettes also. The chief import of this class of goods, however, is from Japan and is in the hands of Japanese importers in Korea.

HORACE N. ALLEN,
Consul-General.

SEOUL, *July 6, 1898.*

INDUSTRIES IN THE NEW HEBRIDES.

Commercial Agent Wolff writes from Nouméa, under date of June 7, 1898:

It is understood here that the New Hebrides Islands are about to become a French possession. They were occupied by the French some ten years ago, but never officially. The entire trade of this fruitful group of islands, imports and exports, amounting to about $1,000,000 per annum, has been hitherto in the hands of French and Australian syndicates. A small number of Americans reside there. The commerce is capable of considerable expansion, and I would urge our people not to lose this opportunity to open trading stations. The land is adapted to the cultivation of coffee, cacao, vanilla, tobacco, sugar, rubber, spices—every kind of tropical and semitropical fruit. Land is given free to immigrants, under certain conditions. I inclose a publication of the French Colonial Union, entitled Guide de l'émigrant aux Nouvelles Hébrides.*

Extracts from the pamphlet are translated as follows:

The total area of the chain of islands known as the New Hebrides is 3,625,957 acres; the southernmost island of the group is about 1,565 miles from Sydney, Australia, and some 230 miles from Nouméa, New Caledonia. The soil, composed of the accumulation of the vegetable débris of many centuries, is of the greatest fertility, covered for the most part with a thick underbrush, which, in places, becomes a dense forest containing a great variety of trees adapted for cabinetwork, shipbuilding, etc., such as the kaori, indian wood, rosewood, and banian. Wild ducks, black pigeons, doves, parrots, and a great variety of birds abound in the archipelago. The climate, like that of all tropical countries, is warm and damp; its unhealthfulness has been greatly exaggerated. The year may be divided into two seasons—during the five months from November to March, inclusive, it is very warm and the islands are subject to typhoons; the months of April and October are cooler, and the intervening five months are of an agreeable temperature, unless the season should be too rainy.

The native population for the whole archipelago is estimated at about 60,000 Canaques, widely scattered. They are savage and treacherous in character, but will not attack foreigners if they see that they are armed or capable of defending themselves. Upon these natives, the European planters—mostly French and English and numbering about 200—must depend for their workmen. There are few real European settlements, except in the Island Vaté, where, at Port Vila, there is a French colony of about 100 inhabitants, including women and children. At Undine Bay, in the same island, there is a small English colony. Here, also, is found the most important station of the French society, comprising a large coffee plantation, a cocoa plantation with 20,000 trees, a banana plantation of 20,000 plants, and fields of maize and tobacco. There is a coffee factory, completely equipped, and an immense reserve dock, with storehouse and sales room. The society also possesses an important station at Port Havannah, in Vaté, and others

*Filed for reference in Bureau of Foreign Commerce, Department of State.

at Port Sandwich, Api, and on the canal of Segond. To every immigrant possessing a capital of 4,000 francs ($772), the society gives 25 hectares (61.8 acres) of land.

The New Hebrides can undoubtedly be developed. Spices and all tropical fruits yield abundantly, as well as vegetables—beans, turnips, carrots, cabbage, eggplant, pumpkins, asparagus, radishes, salsify, water cress—the only exceptions are cauliflower, artichokes, and potatoes. Yams, which yield well, are substituted for the latter. The tobacco is of excellent quality. It is sown in rows like turnips, but before sowing a good fire of brushwood is made, to rid the soil of the parasitic enemies of the plant. At the end of three or four weeks the seedlings are transplanted. In a good year, two or three harvests can be obtained. The yield is from 2,600 to 3,900 pounds to the hectare (2.471 acres), and the price is from 60 to 75 centimes the kilogram (12 to 15 cents per 2.2046 pounds), according to quality. The Sumatra tobacco succeeds the best, but American seeds (Virginia and Connecticut) and oriental tobaccos have been tried.

The cultivation of coffee is remunerative, though not as advantageous as that of tobacco, on account of the expense of manual labor.

The coffee of the New Hebrides is very like that of Caledonia; the kernels are smaller but have a very fine aroma. The price at Sydney varies from 180 to 210 francs ($34.74 to $40.53) the quintal (220.46 pounds). A coffee plantation commences to yield in the third year, but is not in full production until the end of five years. In 1895, 100 tons of coffee were exported; in 1896, more than 150 tons.

Many planters manufacture copra with the cocoanuts, which they buy from the natives. It takes about 8,000 cocoanuts to make a ton of copra. The price varies from 200 to 225 francs ($38.60 to $43.42) the ton at Sydney. The planters, to avoid the risk and expense of transportation, sell them in the islands for 150 to 175 francs ($28.96 to $33.78). About 160 cocoa trees can be planted to the hectare (2.471 acres).

The cultivation of the banana is very easy, and it has assumed large proportions in the last few years; from 10,000 to 12,000 bunches a month are exported to Sydney, where they sell readily at from 1.85 to 3.75 francs (36 to 72 cents) the bunch.

The following table gives an idea of the average price of articles in common use in these islands:

Articles.	Price.	Articles.	Price.
Flour.....per ton...	$53.00 to $68.00	Hatchets.....each...	$1.16 to $1.35
Olive oil.....per bottle...	7.72	Handsaws.....do.....	1.35 to 1.74
Vinegar.....do.....	.19	Pickaxes.....do.....	1.16 to 1.35
Fats.....per pound...	.22	Hammers.....do.....	.39 to .58
Rum.....per quart...	.89	Shovels.....do.....	1.16 to 1.35
Soap.....per bar...	.10 to .12	Wheelbarrows.....do.....	4.83 to 5.79
Petroleum.....per quart...	.09 to .10	Planes.....do.....	.97 to 1.35
Shoes (leather).....per pair...	1.54 to 1.93	Augers.....do.....	.48 to .58
Hats (felt).....each...	.97 to 1.93	Nails.....per pound...	.04

AMERICAN FURNITURE IN ENGLAND.

There is an excellent opening in England for American furniture of moderate price. Competition in high-class furniture is out of the question for the present, for several reasons, and what is here referred to is the opportunity to supply the demand of the better paid mechanics and persons in fair circumstances, known here as the "middle classes."

The furniture used in England may be divided into, say, five grades, viz:

(1) Second-hand furniture, which was originally of the very commonest and cheapest make, bought by the very poor people.

(2) Cheap, new furniture, bought by the poorer paid mechanics, farm laborers, etc.

(3) Furniture of fairly good make and style, bought by the better paid mechanics and clerks and small tenant farmers.

(4) Furniture of good make, with some pretension as to style, and yet of moderate price, bought by the higher grade clerks, shopkeepers, small business men, and well-to-do farmers.

(5) High-grade furniture, bought by the wealthy, varying in price, style, and sumptuousness according to means and taste.

The class of American furniture for which there is an excellent opening in England is indicated by numbers 3 and 4. It is better made, of neater and cleaner finish than the same grade of English furniture, and can compete with it in price.

There is already quite an extensive trade here in furniture brought from North America. But, strange to say, most of this furniture is made in Canada. This trade is rapidly growing, and will undoubtedly soon be a very large one. The Canadian furniture manufacturers seem to be alive to its possibilities, while those of the United States are either indifferent or are not aware of its value. British official figures as to the extent of this trade are misleading, for the reason that Canadian exports made via New York and other ports of the United States are generally credited to the United States and not to Canada. The largest importer in Liverpool of Canadian-made furniture gets nearly all of his consignments via New York, through a permanent agent he has in that city. He does this because the ocean charges are cheaper than via Montreal or any other Canadian port. I notice that in the British Blue Book for 1897, just issued, special attention is for the first time drawn to these instances of misleading statistics.

Two things are certain: first, Canadian furniture makers have a large and increasing market in England; second, that of American furniture manufacturers is comparatively small. The explanation is simple—the Canadian manufacturers meet the peculiarities of the English trade and adopt the English styles, while manufacturers of the United States do not.

There is a difference in the style of American and English furniture. English buyers prefer the English style. Most Americans would undoubtedly say that American medium-class furniture is better made and more artistic than the same grade of English manufacture. But the fact remains that there is a prejudice in England

against the American style. Even in the ordinary English furniture, the carving, though it be machine work, is cut out of the solid wood and is not scroll work "stuck on" to the furniture, as is often the case with American furniture sent to England. Much American furniture on sale here has become shopworn, the failure to sell arising principally from the fact that the carving was "stuck on."

An exception must always be made in favor of the American roller-top office desk. That is much admired in England and is practically without a rival in the market. I find also that there is a fairly good trade in American art screens, they taking the place, to a large extent, of the Japanese and English articles.

Canadian manufacturers invite English orders for furniture made in English style, according to working drawings furnished them by the dealers here. Most of this furniture comes across "knock-down, in the white," without being colored or polished. It is put together and polished here. It arrives packed as solidly as possible in large boxes. Economy in space is an important item. Ocean freights are either by cubic measure or by weight. The Canadian manufacturers send over most of their goods by cubic measure, as it is found to be cheaper than by weight. Several American estimates have been recently brought to my attention as being too high, because the freight was calculated by weight instead of by measurement. The largest importer in Liverpool tells me that he has only been able to get one firm in the United States to make furniture of the English style, after working drawings furnished by himself. From letters shown to me, I learn that several Canadian manufacturers make a specialty of this export trade, studying the styles and peculiarities of each market, and this has developed to such an extent that the capacities of some of the factories have had to be greatly increased during the past two years. It is probable that the British importation of Canadian-made furniture has doubled during the past six months.

Both United States and Canadian manufacturers have, by spurts, endeavored to secure a market in England for "set-up" furniture. This enterprise has been fairly successful on the part of the Canadian manufacturers, because of their adoption of the English style. There are several agencies in this neighborhood for the distribution of Canadian furniture. The trade has not been very encouraging, so far as the United States manufacturers are concerned, principally because they persist in sending furniture of a style against which the English people have a prejudice.

There are other reasons, moreover, why American "set-up" furniture does not find a ready sale in England. The greatest objection, apart from the style, is to the polish. There is a great difference

between the polish on American and English furniture. The English people speak of American furniture as being "varnished," and of their own as "polished." The polish on American furniture is much glossier than the polish on English furniture, but it scratches very easily, and the scratches show white, owing, it is said, to certain gummy component materials which give the glossy surface. The American polish is put on, so it is claimed here, with a brush, or, as is technically known, "floated" on, while the English polish is rubbed in. The American polish is like a coating of glaze on the surface of the wood, while the English polish is partly absorbed by the wood.

Another reason why American furniture does not have a large sale in England is because of careless packing. The other day I saw half a dozen packages of American "set-up" furniture opened. They had been ordered by the dealer as samples, in response to propositions by the manufacturer. Every one of these pieces of furniture was seriously injured in transportation, owing to carelessness in packing. The dealer remarked that he would suffer a dead loss on these samples, and that he would not give any more orders to this particular manufacturer.

This brings up another difference in methods, between Canadian furniture manufacturers and those of the United States who are endeavoring to secure English trade. The Canadian manufacturers who send over samples of "set-up" furniture state their regular price for orders, but say that if the goods are not of the kind to warrant orders they are willing to sell the samples for the price that the dealer can get—that is, the Canadian manufacturer in sending over samples guarantees the English dealer against actual loss, even in those cases where orders will not follow the sending over of the samples.

It is a curious fact that the Canadians have built up their trade in furniture in England almost entirely by correspondence, in rivalry with manufacturers of the United States, who frequently send over commercial travelers, but who have made the mistake of trying to create a demand for the American style of furniture. I would suggest that the furniture manufacturers of the United States send representatives over here, not to get orders for the American style of furniture, but to study the English styles and the peculiarities of the English market; and I am sure that they could, by adopting the Canadian system of using English working drawings, secure a large trade in both "knock-down" and "set-up" furniture.

JAMES BOYLE,
Consul.

LIVERPOOL, *August 16, 1898.*

AMERICAN SALESMEN IN EUROPE.

I have recently had a conversation about Russian trade with two very intelligent salesmen—one an Englishman and the other an American. The American salesman has lately returned from Russia, where he traveled over 5,000 miles in the interest of his house; while the Englishman returned to Birmingham this week after a Russian business tour of 7,000 miles for his British firm.

They both believe, when trading in Russia, in handling your own money receipts and in having your own inspection of rejected goods. It is too easy for a commission agent so very far away to claim "bad packing" and "defective parts" in bicycle and machinery shipments, and these expert salesmen are amazed that one American bicycle manufacturer has allowed his Russian commission agent to recklessly overstock every Russian dealer he could persuade to take bicycles, with "leave to return unsold goods." With so many "openings," this agent is, of course, receiving a good deal of cash and has remitted enough to America to make a showing with his principal. But there is a crash forboding. Both salesmen have declined to allow that agent to handle their goods.

The English salesman, who, I understand, is a reliable person, states that an American manufacturer has the run on scales and is finding that his trade-marks and reputation for making the best scales give him very handsome returns for his goods in Russia, and sales are made so readily that perhaps he is not giving as careful attention to his interests as he should. At any rate, the English salesman asserts that the sole Russian agent of the American scale manufacture is having imitations of the American scale made, placing the name and trade-marks of the American manufacturer on them, and pushing them when he can, thus defrauding his principal and customers. The American, receiving generous orders for the genuine scales, does not suspect his agent of the trick.

I have written letters to the two American manufacturers giving them this information in detail.

Both salesmen have been in Russia before, and are enthusiastic over the possibilities of sale for any line of manufactured goods, if proper methods are adopted to introduce and handle them. They add that Germany has such a hold commercially that antagonism to German merchants is developing, and there is in consequence an opportunity for Americans and Englishmen.

During the past six months, I have met fully sixty American

salesmen, many of whom have made continental business tours, and I have heard a number confess that they made mistakes in agency arrangements on their first trip, by getting into the hands of people who speak English. They found an English-speaking "green-goods man" planted in nearly every continental hotel. Of course, they do not get caught a second time, and the great growth of American trade in Europe is largely due to the ability and energy of the high-class commercial travelers sent abroad, including graduates from many colleges and mechanical and technical schools. There is now a very important body of men trained and experienced in European trade, and it might be well for them to organize, so that manufacturers could write and get the names, addresses, and references of anyone available for employment. It sometimes happens that an effort in some line of trade proves unprofitable, and the men are recalled when the experience they have had has fitted them for other lines. The knowledge of a country and its business methods is often more valuable than the knowledge of a particular business. Men who have this knowledge should not be permitted to return to their old occupations in the United States, where they are soon lost to sight.

The bicycle business is settling down into regular and profitable channels, and in certain directions experimental work is being given up; consequently, some bicycle men with valuable experience are being ordered home and others may be recalled. It has cost the bicycle trade a good deal of money to train these men, and it is to be hoped that the manufacturers of other lines now entering into foreign competition will profit by it, by seeking out and engaging not only those bicycle salesmen who have been successful, but also those who have not met with the same good fortune, for they will know how to do better next time. If, according to business ethics, it be deemed fair to do so, there will be no great harm done to the existing bicycle trade and to the big trade in automatic machinery if other American manufacturers now seeking European trade employ a few of the trained salesmen of those houses. The bicycle and machinery firms have their trade so well established that they will know how to replace men taken. For an American manufacturer opening up a foreign business, there is no more important consideration than the employment of a competent representative.

A profitable business can be carried on here only by personal solicitation. One may find reliable commercial agencies, but they are so very reliable that they are afraid to tell you anything you want to know. There is no Dun's, no Bradstreet's, to depend upon. A competent representative must not only know the people and the country in which he is to work, and the standards of meas-

ure, weight, and value, but he must be an accurate judge of credits and know all the side tricks.

One mistake which our manufacturers make so frequently that it has become a very grave matter, is the custom of giving exclusive agencies with reckless haste, and with practically no investigation of what advantages might result from other methods of sale. Assured of the financial responsibility of some successful firm of foreign merchants offering cash up to 75 or 80 per cent on consignment, or even full payments, they will sign a contract for an exclusive agency, without any effort to find out whether there is an ulterior motive behind the proposition. A $5,000 order now and then—just enough to make a show of progress and to keep the manufacturer content—is a very cheap way of keeping a superior article out of the market. In one order many "nice American styles can be obtained." The copying of American styles is as well understood here as the American copying of Paris styles. A clever foreigner may want an exclusive agency for the sole purpose of learning these styles and suppressing competition. In one case I have in mind, where a buyer was referred to the European agency of an American house, the sale which was finally transacted through this very agency was of a foreign adaptation of the American article and not the article itself. The "special agent" will sometimes serve his principal in this fashion, instead of allowing him to adapt his goods to the foreign demand by keeping him informed of the particular needs of the market.

MARSHAL HALSTEAD,

BIRMINGHAM, *August 13, 1898.* *Consul.*

INDUSTRIAL ENTERPRISES IN SPAIN.

The effect of the war upon Spanish trade is clearly manifested in the returns for the month of June, 1898, compared with the same month of the previous year. There was a decline of 51,000,000 pesetas ($9,843,000) in importations, while the export trade produced an increase of but little over 9,000,000 pesetas ($1,737,000) worth of goods, principally in raw material sought after from abroad on account of the low value of the peseta. But now that the war is over, the making of commercial treaties between America and Spain ought to be considered. Not only should products be exchanged, but various commercial enterprises should be organized.

I desire to call attention to the superior quality of olive oil which is produced in certain districts of this Province of Valencia. Unfortunately, a lack of the spirit of enterprise, as well as an ignorance of trading principles, has kept this product of Valencia practically

unknown to the world. Spanish manufacturers who traded only in their own country or exported to their former colonies have, through fear of competition, adulterated their excellent olive oil with inferior peanut oil; thus not only discrediting themselves, but also the reputation of their products. Soil and labor are cheap in this country, and, above all, money is cheap. Spanish money can be bought at almost half its par value, foreign exchange being at a premium of about 80 per cent. With a comparatively small capital a company might be organized which would own its olive trees, factories and other buildings, and produce a pure and excellent quality of the best refined olive oil, which, if judiciously managed and widely advertised, would soon establish a popular brand and easily compete with oils from other countries, on account of its quality and the exceedingly cheap cost of production.

Aside from the natural resources of the country, the time is favorable for a wider introduction of the products of American industry. Lack of capital is not always the principal obstruction to Spanish enterprise; utter incapacity of management is more frequently the difficulty. I have time and again during my twenty years' residence succeeded in introducing American manufactures, the superior workmanship of which was thoroughly recognized and appreciated, but which were soon ruined by ignorant handling and misuse.

French capital is already in the field. While Spanish money is cheap and every industry embarrassed through want of proper management, Frenchmen have recently purchased factories and bought up railroads and tramway lines, which they run upon their own account and with their own material, returning handsome profits upon their investments and giving this people a practical example of the energy of other nations. Concessions have been granted to men here who are financially unable to work them, and who would be eager to sell if a purchaser could be found.

Opportunities are still abundant to open mines and start steam and electric railways, telephone companies, and electric-light plants in various parts of Spain, and these enterprises would be remunerative, if managed upon an intelligent basis.

These opportunities should be seized before the country has recovered from its present inertia.

THEODORE MERTENS,
Consular Agent.

VALENCIA, *August 14, 1898.*

CALCIUM CARBIDE AND ACETYLENE IN FRANCE.

In reply to an inquiry from the editor of a New York publication in regard to the production of acetylene gas from calcium carbide in France, Consul Thackara, writing from Havre, August 4, 1898, says:*

There are no official statistics bearing upon the annual output of calcium carbide, so that the amount furnished yearly by the different manufacturers has to be estimated. These estimates vary from 1,000 to 5,000 tons per year from each factory, depending upon the demand and the number of hours each establishment works.

There are ten factories at present engaged in the manufacture of carbide of calcium in France. Two are at La Bathie, and one at each of the following places: Séchilienne, Froges, Chapareillan, Lancey, Notre Dame de Briançon, St. Béron, Bellegarde, and Crampagna. Four factories are undergoing construction. They will be situated at St. Etienne de Maurienne, Epierre, Serres, and Chute du Giffre. They will be able to produce, when running at their full capacity, from 2,500 to 3,000 tons per year. The wholesale price of carbide of calcium in France is from 350 to 400 francs ($67.55 to $77.20) per ton, exclusive of cost of packing. The cost of packing is 4.50 francs (87 cents) per iron drum containing 50 kilograms (110 pounds), 6 francs ($1.19) per drum of 100 kilograms (220 pounds), and 11.50 francs ($2.22) per drum of 200 kilograms (441 pounds). The drums, when empty, are taken back by the manufacturers at the invoice price.

The carbide of calcium manufactured in France is guaranteed to give 300 cubic liters of gas per kilogram. The output is constantly increasing, and the supply is fully equal to the demand. The retail price of the article is from 55 to 60 francs per 100 kilograms ($10.615 to $11.58 per 220.46 pounds), not including packing.

There are two villages in France completely lighted by acetylene by the Société Franco-Espagnole du Gaz Acétylène, of No 81 Rue St. Lazare, Paris. They are Alzonne, in the department of Aude, a town of 1,506 inhabitants, and Saurat-par-Tarascon, in the department of Ariege, a place of 3,024 inhabitants.

The ordinary method of introducing acetylene gas into towns, up to the present time, has been the same as that used by the coal-gas companies. For the privilege of furnishing gas to consumers at certain rates, the municipality usually demands of the contracting company that the lighting of the city itself shall be virtually free.

*Report was forwarded to inquirer August 19, 1898.

It is claimed by the French acetylene-gas companies that the installation of a gas plant in each particular house has become so simple that the consumers will not pay an increased price for gas on account of the free city lighting, but prefer to have their own plants, thus having their light at a reduced cost and independent of the city plant. It is estimated by the gas companies that a cubic meter of acetylene gas costs 38.6 cents, but the lighting power being fifteen times that of coal gas, the same unit of light is obtained with a consumption of acetylene gas fifteen times less than that of ordinary gas. Hence, taking 30 centimes (5.79 cents) as the price of a cubic meter of coal gas, there results an economy of 50 per cent in the lighting power in favor of acetylene gas.

A large consumer of calcium carbide informs me that as long as the American manufacturers do not furnish a better article of calcium carbide than they are now doing, and continue to insist upon payment in advance, there will be little chance of importing any from the United States into France.

A NEW GERMAN COMMERCIAL BUREAU.

An organized effort to obtain information, gather statistics, etc., has been projected in this Empire. It is under the direction of very able economic writers, has, as far as I can find out, imperial encouragement if not protection, and is very active in obtaining and disseminating useful knowledge. Its object is to assist the Imperial Government in making satisfactory commercial treaties. Incidentally, it publishes works on subjects along the lines of its labor. It has put forth four already, each remarkable for the grasp of the subject with which it deals. The first covers the British Empire and German Competition; the second, Germany and the Commercial Policy of the United States of America; No. 3 deals with the Policy Necessary to Pursue in Making Trade Treaties. Although not numbered among the organization's publications, Dr. Vosberg-Rekow's work, The Reform of the German Consular System and the Opening of Chambers of Commerce in Foreign Countries, has in it so much of what the organization is aiming to obtain and is so often advertised by the books they have sent out, that it might well be numbered 4 in the series. It would pay to have these books translated into English. They are full of facts whose significance affect us as much as, if not more than, they do this Empire. The one dealing with the United States is divided into six parts, each dealing with a particular phase of the general subject. Part 1 takes up

our territorial possessions and their importance as factors in the growing power of the United States as a competitor of Europe; part 2 deals with the United States protective system; part 3 is given to the Dingley bill; part 4 to the Prussian-United States commercial treaty of 1828; part 5 deals with pan-America; part 6 contains propositions for defense. The work of this bureau is well calculated to aid the Empire's industrial efforts. Taken in connection with recent actions regarding the gathering of statistics of production, it makes a system of census taking as perfect as any ever organized.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *August 6, 1898.*

RAILWAYS IN COLOMBIA.

Consul Madrigal writes from Cartagena, July 10, 1898:

I inclose the annual report of the Cartagena-Magdalena Railroad Company for 1897. This company has now bought seven river steamers, with a total tonnage capacity or displacement of 950 tons. Two more are being built, with a capacity of 600 tons. It already owned three steamers of 700 tons, and will now, after the completion of the two steamers being built, have a tonnage capacity of about 2,250 tons, besides several tugs. Goods can now be shipped direct from this port to the company's warehouses at Honda, the port La Dorado being some 600 miles from here.

EXTRACTS FROM REPORT OF CARTAGENA-MAGDALENA RAILROAD COMPANY.*

During the year 1896, both the through and local traffic increased rapidly, and it is to be regretted that this increase did not continue during the past year in through traffic as it has in local traffic. The lessened business caused a decrease in earnings of $33,226 (Colombian currency), which was more than met by a reduction in operating expenses of $77,569. The causes for this falling off in the through business are almost solely due to the lack of river-carrying accommodations, the fleet of the Compañia del Dique having been wholly inadequate for the proper performance of the service required of it. During the year the Compañia Fluvial de Cartagena was organized for the purpose of operating steamboats on the Magdalena River, and has, in the last few months, put three boats into the service: *Alicia*, of 300 tons; *Helena*, of 300 tons; and *Dorotea*, of 100 tons. This enterprise has been taken in charge by the Cartagena Company.

The great advantages gained by the Cartagena route from the improved and

*The full text of the report is filed for reference in the Bureau of Foreign Commerce, Department of State.

accelerated service given by these boats are already shown by the gain in exports during the first few months of this year (1898).

The general business of Colombia has increased during the past year, notwithstanding the unsatisfactory condition of the coffee market, and, with the efficient river service now assured, I feel greatly encouraged as to the future business of the company.

An addition has been made to the wharf at Cartagena, giving greater length by 120 feet, so that small vessels will not interfere with the berthing of large ships. There has been, also, important work done in the filling and preparation of the grounds adjacent to the wharf for the purpose of constructing steamboats for the Magdalena River; tracks and switches have been laid, a good store built, and three steamboats and one barge constructed.

The new steamers have rapidly cleared away the accumulated freight, and the service will be more prompt in future.

Statement of combined Cartagena companies, December 31, 1897.

Assets.	U. S. gold.	Liabilities.	U. S. gold.
Railway construction	$3,502,828.61	Capital stock	$2,044,033.34
Railway equipment	99,959.88	First-mortgage bonds	1,794,900.00
Terminal construction	418,654.68	Income notes	120,280.00
Terminal equipment	22,189.63	Outstanding securities of Cartagena-Magdalena Railway Company	14,000.00
Subsidies not yet collected (bonds in hand)	47,514.69	Discount from par value of railway securities	191,874.17
Plantations (La Viuda and Santa Ysabel)	347,773.41	Notes payable	120,000.00
Mortgages	20,017.10	Outstanding drafts and checks	3,489.13
General stores (stock on hand)	38,127.92	Construction surplus	660,292.61
Cross ties (stock on hand)	3,508.18	Unclaimed pay	428.25
Coal supplies (stock on hand)	6,986.55	Freight in transit	1,813.80
Companies and individuals (Cartagena and abroad)	37,403.64	Adjustment of exchange*	.....
Contractors	825.30	Unpaid invoices	4,625.46
Camps and residences (Calamar division)	2,884.61		
Insurance paid in advance	456.05		
Due from station agents and conductors	1,772.45		
Remittances to Boston for collection	20,752.42		
Railway loss suspense account	4,181.08		
Stock in Compañia Fluvial de Cartagena	10,000.00		
Terminal dockyard	1,446.13		
Compañia Fluvial de Cartagena (current account)	4,176.38		
Cash in hands of Boston trustees	5,919.35		
Cash on hand in Colombia	4,695.51		
Operating deficit to date	216,716.28		
Adjustment of exchange*	136,946.91		
Total	4,955,736.76	Total	4,955,736.76

*This account is made necessary by the fluctuations in the value of Colombian currency, the books of the company being kept in that money.

The total through freight carried by the road in 1897 amounted to 19,987,455 tons (of 2,204 pounds); the local freights were 10,405,795 tons; the earnings (gold) were $166,700; the number of passengers carried, 73,848. The imports and exports of Cartagena in 1897 (nearly all of which passed over the company's wharf) were:

*Value (in gold) of produce exported.**

Articles.	Value.	Articles.	Value.
Coffee	$987,920	Mineral	$85,590
Tobacco	579,675	Divi-divi	6,875
Hides	155,770	Cedar and mahogany	89,710
Ivory nuts	130,320	Specie	1,554,010
Rubber	52,800	Various articles	55,400
Cocoanuts	145,170	Total	3,848,800
Fustic	5,560		

*Compiled from data furnished by T. C. Stevenson, esq., Her Britannic Majesty's vice-consul.

The following (included above) did not pass over the company's wharf, but were loaded at out ports:

Articles.	Quantity.	Value.
	Kilograms.	
6,982 pieces cedar and mahogany	5,607,000	$89,710
45,000 bags cocoanuts	3,600,000	135,000

*Value (in gold) of imports.**

From—	Value.	From—	Value.
Great Britain	$1,631,739	Holland	$5,137
United States of America	774,662	Belgium	3,878
France	691,929	Colon	44,908
Germany	685,627	Total	3,989,011
Spain	96,452		
Italy	54,679		

*Compiled from data furnished by T. C. Stevenson, esq., Her Britannic Majesty's vice-consul.

BICYCLE INDUSTRY IN GERMANY.

There is danger of increased duties being levied on bicycles and parts of bicycles sent to this Empire. A crisis is looked for in Germany's bicycle business. Failures have occurred and are to be followed by others. "This," says a writer who wants to see increased duties, "is the result of the enormous increase in the imports of bicycles and bicycle parts from the United States." He speaks of the cheap and bad wheels brought over and the indifference of American manufacturers to the quality of their wares, although it is known that American wheels and parts are the best in the world. The meaning of these articles is that bicycles will be put under the class of "vehicles" in the German tariff and made to pay, without doubt, from $10 to $15 each. The German bicycle makers have heretofore pointed out the danger from American competition and begged for increased duties as the only safe way to keep out American machines. Everyone admitted the need, but nothing was then

done. Now the danger has gone over into actual damage. Manufacturers are gathering statistics to show how many people have been thrown out of employment by the importation of American wheels. It is useless to disguise or to try to disguise what is everywhere too apparent, namely, that this country is commercially hostile to our own. Whether the product be apples, meats, wheels, or anything else, if it interferes with the products of the Empire, ways and means will be found to keep it out.

Inasmuch as manufacturers here flood the United States with their wares before every new tariff bill which increases duties goes into effect, it would be wise for our bicycle manufacturers to load up their German storehouses with wheels and parts, in anticipation of tariff legislation that seems now inevitable. Before sending, however, our manufacturers should bear in mind that this market is already overstocked. This is perhaps due to the efforts made by the best manufacturers to keep up prices. One of the largest and best concerns in the Empire has manufactured parts on hand, ready to be put together, for more than 200,000 wheels. If this is true, and I am quite sure it is, what must be the condition of concerns whose wheels are by no means as good as those of the firm referred to? If huge quantities of wheels are sent over, it must be with the object of relieving the United States market, and not in order to make money; for, in self-protection, the big manufacturers here will have to seek relief not only in higher duties on imported wheels, but in reduced prices for their own products.

J. C. MONAGHAN,

CHEMNITZ, *August 1, 1898.* *Consul.*

BICYCLES IN ADEN.

The following information has been received from Consul Cunningham, of Aden, under date of August 2, 1898. The report was made in answer to inquiries from a Chicago manufacturer, relative to the bicycle industry in Aden.*

The many inquiries received at this consulate from American bicycle manufacturers and exporters in reference to the bicycle trade here lead me to think too little is known of the conditions both of the climate and topography of this locality.

Owing to the very rough streets and roads, which are hilly besides, few inducements are offered for the use of the bicycle; then it is well known that the days are so hot that no one can expose himself to the rays of the sun on a wheel at any season of the year without great danger. This confines the use of the bicycle entirely to

* A copy of Advance Sheets has been sent to the inquirer.

the time between sunset and sunrise. For these reasons the trade in wheels, which is attaining so much popularity throughout the world, is remaining quite stationary at this place.

There are perhaps not over twenty-five wheels in the four towns in this British colony—Aden, Little Aden, Steamer Point, and Shaik Othman—and they are owned solely for recreation, and not for convenience of travel. Even if conditions were favorable to its use, none of the natives are able to afford a wheel. Those here are owned by Europeans, who are connected with some European or American exporting house, and by persons who are British Government or army officers, whose residence here is temporary and not such as to create a demand for many wheels. It is true there is a great deal of travel between the four places above spoken of, but the condition of the soil and the topography of the country render the use of the wheel between them next to impossible. To say the least, even an experienced cyclist finds no pleasure in it.

There are no regular dealers in wheels, nor in repairs for bicycles here. I think three firms, all of whom are general importing and exporting merchants, have made an effort to introduce bicycles by making small orders; but none has met with any success. One of them has had four of his wheels on hand since 1896. A very few (from one to six) may be sold here each year, but the number is so small that it would not justify any house to go to much expense to put their wheels on sale. Those now in use are principally of American manufacture.

The demand for wheels being so limited, it likewise follows that the demand for repairs is limited, though some supplies can be sold here to meet the demand of the few wheelmen who are continually having to send to London or elsewhere for such repairs as they may need.

I can see no prospect for an increased demand in this market for bicycles of any description or make.

AMERICAN BICYCLE COMPETITION IN ENGLAND.

Consul Halstead writes from Birmingham, August 8, 1898:

The following communication appeared in the Birmingham Daily Mail. While exaggerated and untrue in several particulars, it is a British recognition of the fact that American bicycle manufacturers use their splendid plants effectively. It may serve as an encouragement to manufacturers in other lines.

I think it is about time some of our cycle manufacturers woke up from their slumbers and realized the state of the cycle trade. It is all very fine for them to go

on in this old-fashioned way, and say that they don't fear American competition. But America can and does compete with them in their own markets. Many Birmingham firms to-day have expensive automatic machines standing idle, waiting for the next season to come round. Now, when the cycle season is over in America, they start these machines on such components as small screws, nuts and bolts, washers, rivets, adjustments, steps, lock washers, and various screws used in the trade. Just when the season is coming in again, they pack these off to England at very low prices and start their automatic machines on the ordinary cycle parts just in time for their markets. By doing this they not only keep the best of their workmen together, but make profits while the English firms are idle. No maker in Birmingham can deny that 90 per cent of the smaller parts come from America and Germany. English firms have plants just the same, and if they would go in for making these things in the winter they would make a small profit; then, when the season comes in, they would not have so much lost time to pull up. I should like to point out that there is a vast quantity of American hubs and pedals sold in Birmingham even at the present time.

BICYCLES IN MEXICO.

Consul-General Pollard, writing from Monterey, August 13, answers questions propounded by an association of bicycle manufacturers in the United States as follows:

No bicycles are manufactured in the Republic of Mexico. Several firms buy all the component parts of machines and put them together afterward, but the complete wheel is not manufactured in Mexico. All the parts are procured from the United States, and almost all the machines manufactured in the United States are represented in Mexico. The chief importers of bicycle parts are Messrs. Howe & Co., of Monterey; Messrs. Moler & Degrees, of Mexico City; and Messrs. Pomery & Co., of Guadalajara. The prospects for increased traffic in goods of high quality are promising. The entire component parts of each wheel, however, are demanded, owing to the number of different makes in the country. The duty on parts of bicycles not nickel plated is 2 cents per kilogram (2.2046 pounds); on parts nickel plated, it is 20 cents per kilogram.

With reference to the future of bicycles in Mexico, it may be interesting to state that for the last four years the demand therefor has increased each successive year more than 5 per cent over that of the preceding year. There is no doubt that anyone having capital to start a manufactory in this Republic would meet with success, and that large gains would ensue to the investors in such an enterprise. There are good prospects, too, for the manufacture of rubber tires and rubber parts of bicycles. The raw material can be obtained in Mexico for this purpose.

GERMAN VIEW OF THE RESULTS OF THE WAR.

Consul-General Mason sends from Frankfort, under date of August 22, 1898, the following translation of an article in the Frankfürter Zeitung of August 20, 1898:

The conclusion of peace which ends the Spanish-American war marks a new epoch in history, not only for the United States, but likewise for Europe. The United States has taken an important step toward the exclusive control of the American continent; it has also reached beyond that and claimed its share in the conduct of the world's affairs. Since it now controls the West Indies, the construction of the Nicaraguan Canal will be no longer delayed. Then will the eastern and western portions of the Union be brought into closer relations, which will be of important significance not only for the commerce, but for the naval power, of the United States.

From San Francisco westward by way of Hawaii and the Ladrone and Philippine islands, which will be developed into strongholds of American power, the United States will reach across the Pacific Ocean to the Asiatic coast and will have a powerful voice in deciding the destiny of eastern Asia, for it has there just as important commercial interests to foster and protect as any of the European powers. That it realizes fully the importance of this and other questions at issue, is evinced by the promptness with which it is proceeding to a notable strengthening of its Navy and standing Army.

With what force and energy the Union enters upon its rightful position among the controlling nations of the world will be shown by a glance at its material resources and productive capacity. There is, first, the fact that in the fiscal year ended June 30, 1898, the Union had a surplus of exports over imports amounting to 2,500,000,000 marks ($595,000,000), while all the European nations show a more or less important deficit in their balance of trade—Germany about 700,000,000 marks ($166,600,000) and England about 2,400,000,000 marks ($571,200,000). Other comparisons are equally instructive. John Shafroth, in his speech before the House of Representatives on the 26th of May last, gave the following statistical data:

In the year 1890, the property of the United States was valued at $62,000,000,000, while the property of the whole world was estimated at $290,000,000,000. The American people, who number 70,000,000 souls, or one-twentieth of the population of the globe, possess, therefore, more than one-fifth of the entire wealth of the human race. The Union has 182,000 miles of railways, half as much as the remainder of the world entire. In the year 1892, the freight transported in the United States was equivalent to 845,000,000 tons carried a distance of 100 miles; in the same year all other countries together transported the same distance only 503,000,000 tons. The annual earnings of the railways of the United States are about $1,000,000,000, nearly half of the railway receipts of the whole world, which amount to $2,515,000,000. The steam marine of the United States registers 14,400,000 horsepower, one-third of the registered steam tonnage of the world.

In the year 1896, the United States produced 10,000,000 bales of cotton, and out of the 13,000,000 bales produced by the whole world the Union alone consumed 3,500,000 bales—that is, more than one-fourth of the entire cotton consumption of the human race. Its production of cereals is more than one-fourth of the crops of the world entire. Its output of coal in 1897 reached 198,000,000 tons; while all

other countries combined produced only twice as much—in round numbers 400,000,000 tons. The telegraph lines of the world included, in 1897, 4,908,000 miles of wires, of which 2,506,000 miles, or more than half, are in the United States. The postal service of the world transports yearly 17,000,000,000 letters, of which the United States alone sends 5,000,000,000. The mechanical appliances which the United States employs to aid and supplement human labor comprise more than one-fourth of the equipment of the entire world.

These figures, to which might be added others equally significant, will suffice to show that the people of the United States, in respect to their resources and capacity of performance, can no longer be compared with any other single nation; the comparison must be made with the entire rest of the world. They form the clearest and most convincing proof that the United States is, in fact, a great world power and as such must have a world policy.

Thus far, there is not the slightest cause to regret the development of this power; we believe, on the other hand, that it is a cause for rejoicing to all mankind. We can, indeed, see the numerous dark spots which shadow the condition of the American people; but when one compares with these the many bright spots, it is seen that there are far more lights than shadows. The American national character wins when compared with that of other nations; and it must be remembered that in the frankness and intelligence of this national character, its tireless energy and ardor for improvement, are given the conditions and the strength which modify even the defects of the people and shield them from the dangers of degeneration. Labor, freedom, tolerance—these are the foundations upon which American statehood rests, and upon which it can securely rest in future.

The Americans have no aristocratic caste, born with the pretension of being better than other men, and for whose benefit the masses should toil; they have no clericalism which seeks to rule and finds in all progress an enemy that must be resisted at every cost; they have, finally, no bureaucratic traditions, which stifle every movement toward freedom and make the citizen the slave of the machinery of state. This does not please many European diplomats and their adherents, and they give unrestrained expression to their aversion to the "free-and-equal masses," the "plebeians," etc. They would even give expression to this aversion in overt acts if, indeed, the United States had not already become too great a power to be bullied.

The Kreuz Zeitung (Berlin) has been greatly distressed over the reasons which have led us in the present war to the side of the United States. After considering and demolishing several of such reasons, it is all the more forcibly struck by the final one—"because the United States is a republic!"

That is very superficially conceived. If we had ever rhapsodized over the republican form of government, as such, we should have been long ago thoroughly cured of such delusions by what has happened in France. We are not concerned with the outward form, but with the substance—the independent, self-reliant citizenship; the respect for honest labor; the tolerance of free thought and action; the generous, unprejudiced humanity of thought, feeling, and deed. All these things we have not found in Spain, nor among many of the friends of Spain.

What would have happened had Spain triumphed in this war? National darkness, narrowness, and corruption would have prevailed; and everywhere the advocates of political and clerical absolutism, which the Spanish governmental system breeds and fosters, would have gained new and important strength. But this has not happened, and for these reasons it can be fairly said that the victory of the United States is a triumph for progress and a gain for mankind.

The new world power has now some new and difficult problems to solve. Cuba will present a serious task, and the Philippine question will be still more complex

and difficult. Cuba can be managed by the Americans alone, but the Philippines are a realm in which the interests of other great powers meet and collide. From the manner in which the United States Government meets and solves this problem will be seen and demonstrated whether it can command the wisdom and moderation proportionate to its opportunity and power.

THE SHANSI CONCESSION.*

I have the honor to report the first concession ever granted by the Imperial Chinese Government to a foreign syndicate, by the terms of which foreigners have the right to open and work mines, construct and operate railways, and all entirely free from Chinese control other than the payment of a royalty and conformity with the general laws of the Empire as applicable to foreigners.

On the 21st day of May, 1898, there were signed, in the presence of the ministers of the Tsungli Yamên, articles of agreement which ceded to the Pekin Syndicate, Limited, of London, the sole right to open and work the coal and iron deposits of central and southern Shansi and the petroleum deposits of the entire province; also, the right to construct and operate all necessary railways to main trunk lines and navigable waters for exporting the mining products.

The agreement was signed by order of imperial edict, stamped with the seal of the Tsungli Yamên as a visible sign of imperial sanction and authority, and the whole proceedings were verified and ratified by the British and Italian ministers to China.

The signing of this contract marks the most important epoch in the industrial policy of China. The precedent has been established of allowing foreigners, for commercial purposes, to own real estate in the interior of China, open and operate mines, and construct and maintain railways.

There have been many so-called mining concessions granted in China, but not one of them is worth the paper it is written on.

Of the railway concessions, only one—the Belgian Syndicate for the Pekin-Hankau Railway—has gotten beyond the preliminary stage, and in none is the syndicate more than the financial agent of the Chinese. These railway syndicates have no voice in the management and not too much security for their money. As a matter of fact, up to date neither the Belgian Syndicate nor any other syndicate has furnished one cent of money.

The following is a synopsis of the articles of agreement between the Pekin Syndicate and the Chinese Government:

The right to open and work coal and iron deposits in certain

---

*See "Mining and railway concessions in China," *ante*, p. 260.

(named) districts in the province of Shansi, and the sole right to all petroleum—these rights to exist for sixty years—are granted.

Private lands are to be purchased, and on Government lands the syndicate is to pay double the present land tax.*

All matters of administration, exploitation, management of employees and finances shall be controlled by the board of directors of the Pekin Syndicate. Each mine is to have foreign managers and one Chinaman to arrange disputes with natives. All accounts are to be kept by foreign methods, but audited annually by a native of China. All salaries are to be paid by the Pekin Syndicate, and all receipts and payments shall be controlled by foreigners.

All damage done private property in prospecting is to be paid for; cemeteries and mortuary shrines are not to be disturbed.

The Chinese Government is to receive 5 per cent producer's tax on the actual cost of extracting coal, iron, or other material. The syndicate is to receive 6 per cent interest on the capital of the company, and 10 per cent shall be set aside as a sinking fund with which to repay the capital. Of the balance net profit, the Chinese Government is to receive 25 per cent and the Pekin Syndicate 75 per cent. All future coal or iron mines worked with foreign capital shall pay the 5 per cent producer's tax.

The Chinese Government is not to be held responsible for losses.

All important machinery and material shall pay 1½ per cent† the regular maritime customs dues, but no likin taxes. Mining products exported from a seaport shall pay regular export duty.

At the expiration of sixty years, all machinery, plant, buildings, mines, railways, etc., revert gratis to the Chinese Government.

The syndicate shall establish a school of civil engineering and mining for about twenty Chinese students.

Chinese may buy shares in the company (the Imperial Chinese Government has reserved £250,000 worth of shares, for which it pays cash the par value).

When Chinese own 75 per cent of the shares of any one mine, they may redeem the balance from the syndicate and operate the mine. Private mines now in operation may continue to work or sell out to the syndicate.

The syndicate has the right to build all necessary roads and bridges, open or deepen canals or rivers, and construct all railways to connect mines with main trunk railways or navigable waters.

In case China goes to war, the syndicate will obey the orders of the Chinese Government prohibiting aid to the enemy.

---

*This will be about 50 cents gold per acre, and applies only to land the surface of which is actually occupied.

† According to the Chinese tariff, the import tax on machinery is 5 per cent.

The Pekin Syndicate is composed of a few men who control immense capital, and who have obtained the most valuable concessions China could make. The preliminary work has been in progress for over two years. The concessions will be worked by the Anglo-Italian Syndicate, with a capital of £6,000,000.

The success of this enterprise is due, first, to the fact that the syndicate was willing to spend money upon the chance of getting a concession, and that, after sending their general agent to China, they simply allowed him to manage affairs here and kept him supplied with money. Then the agent, Mr. A. Luzzatti, has shown wonderful tact in dealing with Chinese officials, judgment in selecting his assistants and in utilizing all available means to success, and untiring perseverance.

The province of Shansi lies to the west of Chihli. It consists of an interior plateau of 3,000 feet elevation, more or less cut up by rivers. This plateau is bounded on all sides by mountains rising to 8,000 and 14,000 feet above the sea. In some places, these ranges have been cut through by rivers; but in all parts they are rugged, and transportation must be effected by pack mules or camels. In the eastern portion of the province, and running into the province of Honan, are deposits of anthracite coal. The western half has bituminous coal covering some 12,000 square miles, and all along the western boundary are deposits of petroleum. At many different points in the coal region are deposits of rich iron ore.

The coal strata are practically horizontal, and at an elevation of about 2,500 feet. They show wherever erosion has cut to a sufficient depth. This anthracite-coal vein is unbroken over an area of 13,500 square miles, and its thickness varies from 25 to 50 feet, an average of 40 feet. All of this deposit is within the limits of the concession. There are thousands of native coal mines now in operation, and the coal has been used for probably three thousand years. The iron ore is now worked by the natives. This entire region has been examined by William H. Shockley, mining engineer, and Charles D. Jameson, civil engineer, both Americans and in the employ of the syndicate.

There is probably no coal field known in the world that can compare with this of Shansi, either in quality or quantity of coal or the possibility of cheap production. In addition to the concession in Shansi, there was signed on the 21st of June an identical agreement ceding to the Pekin Syndicate all of that portion of Honan north of the Yellow River (about 10,000 square miles) and another agreement by the terms of which all of the mountainous part of Honan south of the Yellow River is ceded to the syndicate as soon as work is begun on the Shansi concession. The total area of these concessions

is 71,000 square miles, equal to England and Scotland. The accompanying map* shows the area of the concession and the proposed railway.

For the map and information contained in this report I am greatly indebted to Charles D. Jameson, civil engineer.

JAMES W. RAGSDALE,
Consul.

TIENTSIN, *July 8, 1898.*

COMMERCIAL CONDITIONS OF ZANZIBAR AND EAST AFRICA.

The possessions of the Sultan of Zanzibar now comprise the islands of Zanzibar and Pemba, which are directly under the Sultan's government, and a strip of land on the coast of Africa, 10 miles inland from the sea and some 200 miles in length, which is farmed out to the British and is the outlet for British East Africa and Uganda; also four small districts lying on the coast, known as Magadisha, Merka, Brawa, and Warscheik, leased by the Sultan to Italy.

The people of the rural districts of the islands of Zanzibar and Pemba are Arabs and the natives Swahilli, the Arabs being principally the ruling class and the Swahilli the laboring class. The Swahillis are an inoffensive, half-indolent people, with fair native intelligence, quick to learn, much devoted to their Mohammedan religion, and very loyal to the Sultan and the few white people who belong to his Government and to the English protectorate. These people cultivate the sweet potato, manioc, mohogo, a variety of small indian corn, beans, pease, sugar cane, rice, pumpkins, yams, tomatoes, mandarins, oranges, bananas, shuck-shuck, cocoanut, and cloves; also some other varieties of vegetables and fruits. They also raise many goats and cattle for their meat and for the milk they yield.

Cloves, clove stems, copra, cocoanuts, shells, cattle hides, and goatskins are the principal products of the islands that are exported; many other exports are shipped from the port of Zanzibar, coming from the African continent, among which is ivory.

The city of Zanzibar contains a population estimated at 100,000, consisting of Arabs, Swahillis, English, Germans, French, Italians, Portuguese, a few Americans, and a great number of Hindoos of various caste, and all forming an active but quiet and peaceable population. The city is now and has been for centuries the great emporium for trade with all central East Africa, being the receiving and distributing point for imports and exports.

---

* Filed for reference in the Bureau of Foreign Commerce, Department of State.

The Government of Zanzibar is a sultanate, presided over by a sultan, His Highness Seyyid bin Hamoud bin Mahommed, and his official staff and subordinates. The Government has no currency, the Indian rupee and fractional parts thereof being the medium of exchange; the rupee being at this time worth about 32 cents in United States gold, but continually fluctuating. The revenues of the Government are approximately $600,000 per annum, derived from customs dues, water supply, registration, rents of Government property, port dues, shipping, and the post-office. The expenditures about equal the revenues. Zanzibar has no public debt. There is no tax levied on personal property or real estate.

Zanzibar is practically a free port; spirituous liquor and medicines containing spirits, firearms and ammunition, opium, tobacco, rice, and grain being taxed 5 per cent ad valorem. All imports to Pemba pay 5 per cent duty.

Duties on exports from Zanzibar are as follows: Beans, millet, and corn, 25 cents on each 360 pounds; chillies, 10 per cent ad valorem; cloves, 25 per cent ad valorem; sea shells, 5 per cent ad valorem; gum copal, 15 per cent ad valorem; peanuts, 12 per cent ad valorem; goats, 25 cents each; rubber, 15 per cent ad valorem; hides, orchilla weed, and tortoise shells, each, 10 per cent ad valorem.

Foreign purchasers of goods for export, as a rule, are expected to pay cash for the goods when purchased, and foreign shippers are paid cash for goods imported.

Zanzibar has no manufactories or mechanical industries of any kind, except the making of ornaments from ivory, ebony, and silver, a small amount of rough furniture, and artificial ice.

The only illuminating oil imported is American petroleum. Plain American cotton goods are preferred by the natives to all others, although a great many cottons of Dutch manufacture are imported and worn by the native women. These last are prints in many flashy styles, in fast colors, and should be duplicated by American firms, as I fully believe they would displace the Dutch article, the people taking kindly to everything American.

The internal trade of Zanzibar is quite extensive, but no statistical information is obtainable of the amount of this trade, and nothing like an accurate estimate can be given.

The following table shows the number of vessels, with the tonnage thereof, clearing at the port of Zanzibar, for the year ended June 30, 1898:

Description.	Number.	Tons.
Ocean vessels	163	255,705
Coasting vessels	161	25,295

The following ocean lines call at Zanzibar regularly: The British India Steam Navigation Company, making direct connection with other steamers of the company for points west and London; the Messageries Maritimes de France, between Marseilles and Zanzibar; the Deutch Ost-Afrika Linie, from Hamburg to Zanzibar and the south. There are also several lines of coasting vessels.

To some extent the foreign trade of central East Africa has, in the last two or three years, been diverted from Zanzibar City to the coast towns on the African coast; principally to Mombasa, in the British East African protectorate, and to Tonga and Dar Es Salaam, in the German East African protectorate. As these portions of Africa develop, these cities will draw more from the Zanzibar trade.

British East Africa and Uganda, extending from the east coast to Lake Nyanza and beyond, has a great future before it. A land mostly well watered, with good soil and for the greater part occupying a high plateau, with a pleasant and healthful climate, adapted to the culture of wheat and corn and all kinds of vegetables and fruits—those of the temperate as well as the tropical zone—will develop into a great country. A railroad from Mombasa, on the coast, to a point on Lake Nyanza is now being built. It is completed a distance of 180 miles, and passes within 40 miles of Mount Kilimanjaro, the highest mountain of Africa.

JOHN C. BILLHEIMER,

ZANZIBAR, *July 14, 1898.* *Consul.*

LAWS GOVERNING THE MANUFACTURE OF GLUCOSE.

I transmit herewith translated copy of a law relative to the manufacture of glucose, sirups, and invert sugar, which goes into effect August 15, 1898.

There now exists in this country an indirect bounty in favor of the manufacturers of sugar amounting to 45 francs ($8.685) per 100 kilograms (220.46 pounds) of raw beet sugar. It operates as follows:

If a manufacturer of raw beet sugar should declare to the excise department of the Belgian treasury that from 1,750,000 kilograms (3,850,000 pounds) of beet juice he produces 1,000,000 kilograms (2,204,600 pounds) of raw beet sugar annually, the Government, upon this declaration, will credit him with 450,000 francs ($86,850), at the rate of 45 francs ($8.685) for every 173 kilograms

(381 pounds) of beet juice consumed—a rebate equivalent to an excise duty of 45 francs ($8.685) per every 100 kilograms (220.46 pounds) of beet sugar produced, or 45 centimes (8.685 cents) the kilogram (2.2046 pounds).

GEO. W. ROOSEVELT,
Consul.

BRUSSELS, *August 5, 1898.*

Excluding the formal preamble, the translation of the law of Belgium relative to the manufacture of glucose, sirups, and invert sugar is as follows:

EXECUTION OF THE LAW OF MAY 19, 1898, RELATIVE TO THE MANUFACTURE OF GLUCOSE, SIRUP, AND INVERT SUGAR.

Deduction for loss in manufacturing.

In view of articles 1, §1, 2, and 28, 2°, of the law of May 19, 1898, relative to the manufacture of glucose, sirup, and invert sugar, worded thus:

"ARTICLE 1, §1. The excise tax upon the manufacture of glucose, by means of starch, grain, or other similar materials, is fixed at 40 centimes (7.7 cents) per hectoliter (26.417 gallons) of saturated saccharized juice, not filtered, at a density of 1° of the densimeter of Gay-Lussac, at a temperature of 17½° of the centigrade thermometer.

"ART. 2, §1. A deduction is allowed as compensation for waste resulting from refining the saturated juice and loss arising in the manufacture.

"§2. The amount of this deduction can not be less than 10 per cent of the quantity declared in execution of article 28, and the conditions to which it is subjected are determined by the Government.

"ART. 28. The declaration of working should set forth:

"The quantity of saturated juice, not filtered, brought to 1° of density at a temperature of 17½°, which the manufacturer calculates to produce. This quantity can not be less than 10,000 liters (2,641.7 gallons)"—

It is decreed:

SINGLE ARTICLE. The deduction mentioned in article 2 of the law of May 19, 1898, is fixed at 10 per cent of the quantity of juice declared in conformity with article 28. The present order will enter into effect the 15th of August, 1898.

Dilution of raw material by means of juice of weak density proceeding from previous operations.

In view of article 32, of the law of May 19, 1898, relative to the manufacture of glucose, sirup, and invert sugar, worded thus:

"ART. 32. The Government may, under conditions which it will determine, authorize the dilution of raw material by means of juice of weak density proceeding from previous operations"—

It is decreed:

ARTICLE 1. Manufacturers of glucose may employ for the dilution of raw material, juice proceeding from washing the filters, the density of which, at a temperature of 17½° of centigrade thermometer, does not exceed 3°; this juice to be kept in reserve, in one or more special vessels, until required for use.

ART. 2, §1. The manufacturer who intends taking advantage of the privilege

accorded in article 1 must make mention of the fact in his declaration of working and inscribe in a register furnished by the Government, on one side, the date and hour when the juice is put in reserve, the volume, and density of a temperature of 17½°, as well as description of vessels in which it is to be kept; on the other side, the date and hour when the juice is to be used.

§2. The inscriptions, to be conformable to §1, must be made: For the first entry, at the time the juices are emptied into the vessels specially used for the purpose; for the second entry, at the time immediately preceding their mixture with the raw materials.

§3. The inscriptions must be legible, without erasures or additions, and in conformity with instructions placed at the head of the register.

ART. 3. The juice used to dilute is deducted from the product of sugar in the manufacture of which it has been employed.

Exportation or storing in public warehouses of glucose with discharge of excise tax.

In view of article 61, §1, of the law of May 19, 1898, relative to the manufacture of glucose, sirup, and invert sugar, worded thus:

"ART. 61, §1. For auditing credit account by exportation or by storing in public warehouses, the discharge of the excise tax is calculated according to duty tax and according to rules fixed by the Government"—

It is decreed:

ARTICLE 1. The discharge of excise tax on glucose exported or stored in public warehouses is calculated at the rate of 15 francs ($2.895) per 100 kilograms (220 pounds) of dry extract contained in the glucose.

ART. 2. The schedule of exportation or storing in public warehouses shall specially mention:

(*a*) The kind of glucose (sirup, crystal, or lump glucose).

(*b*) Gross and net weight by kind of product.

(*c*) The percentage and total quantity of dry extract contained in each kind of glucose.

ART. 3, §1. The customs officers will take from each kind of product two samples of a minimum weight of 250 grams (0.55 pounds) each, the samples to be sealed with the Government seal. The person making declaration will also affix his seal. One of the samples is to be retained at the custom-house, the other transmitted to the Government to be analyzed. At the request of the party making declaration, a third sample, sealed in same manner, may be delivered to him.

§2. The party making declaration provides the bottles, boxes, or other receptacles for the samples.

§3. Permits for exportation or storing can not be issued by the customs officers until they have received notification of the result of the analysis.

§4. The agents may authorize the exportation or storing in public warehouses of glucose before having received the notification mentioned in §3, provided the party making declaration signs a written agreement to abide by the result of the analysis.

Exportation bureaus.

In view of article 67, of the law of May 19, 1898, relative to the manufacture of glucose, sirup, and invert sugar, worded thus:

"ART. 67. The exportation of glucose with discharge of excise tax will be through bureaus designated by the Government and under conditions established for excise traffic in general"—

It is decreed:

SINGLE ARTICLE. The following table shows bureaus open for the exportation of glucose with discharge of excise tax:

Authorized bureaus for—		
Verification in detail (article 67 of the general law).	Inspection in going out and the issuing of permits of exportation (articles 55 and 65 of the general law and article 19 of the law of August 6, 1849).	Ways authorized for exportation.
Antwerp, Brussels, Louvain	Antwerp	By sea and by rivers: Scheld and canals.
Bruges	Houcke	By rivers: Canal of Bruges to the Scheld.
	Ostende	By sea: Bruges Canal to Ostende.
Ostende	do	By sea.
Ghent	Selzaete	By sea and rivers: canal from Ghent to Terneuzen.
Alost, Antwerp, Arlan, Bruges, Brussels, Charleroi, Courtrai, Ghent, Liege (first bureau), Louvain, Mons, Namur, Ostende, Termonde, Tirlemont, Tournai, Verviers	Achel (station), Adinkerke (station), Agimont (station), Athus (station), Blandain (station), Bleyberg (station), Daische (station), Erquelinnes (station), Esschen (station), Hamont (station), La Clinge (station), Lamorteau (station), Lanaeken (station), Momignies (station), Mouscron (station), Péruwelz (station), Quévy (station), Quiévrain (station), Selzaete (station), Sterpenich (station), Vierves (station), Visé (station), Weelde (station), Welkenraedt (station).	By railway.
Erquelinnes (station)	Erquelinnes (station)	
Esschen (station)	Esschen (station)	
Mouscron (station)	Mouscron (station)	Do.
Quiévrain (station)	Quiévrain (station)	
Sterpenich (station)	Sterpenich (station)	
Welkenraedt (station)*	Welkenraedt (station)	

*But only for exportation of slow freight.

LEATHER IN CAPE COLONY.

The following, dated Cape Town, June 20, 1898, has been received from Consul-General Stowe:

The parliament of this colony has under consideration a bill to decrease the tariff on tanned leather, boots and shoes, saddlery and harness, and has been memorialized to vote against said bill. The following statements are made:

The capital employed in tanneries in Cape Colony, consisting of buildings, stock, and plant, is valued at £120,000 ($583,980); annual value of South African raw products used, £65,000; of material imported for manufacturing purposes, £3,250; wages paid, £16,000.

In the manufacture of boots and shoes, South African tanned leather is used annually to the value of £85,000; material imported, £4,250; wages paid annually, £35,000.

In saddlery and harness, South African tanned leather is used annually to the value of £65,000; imported material, £15,000; wages paid annually, £35,000.

It is claimed that local industries have only 7½ per cent protection—not enough to meet English and American competition. The wages paid are fully twice those given in England for skilled labor.

The petitioners also assert that if the colony of Natal comes into the customs union, the manufacturers in Natal will be on better terms, as the government there offers a bonus on leather manufactures of £2,500 on the first £10,000 worth of leather made; £1,000 on the first £10,000 worth of boots and shoes made; and £1,000 on the first £20,000 worth of saddlery and harness made.

A tariff is requested that will practically shut out English and American goods. The present duty in Cape Colony is as follows: Boots and shoes, 9 per cent; leather tanned for boots and shoes and for saddlery and harness, free; saddlery and harness, 9 per cent. It is proposed, by the bill referred to, to reduce the tariff to 7 per cent.

SUEZ CANAL TRAFFIC.

The following is a statement of the Suez Canal traffic for the half year ended June 30, 1898:

Nationality.	Number of ships.	Net tonnage.	Traffic receipts.
British	1,196	3,252,634.76	$5,904,926
French	107	439,001.71	535,320
Austrian	49	122,658.02	221,763
Spanish	18	54,914.41	111,524
Italian	39	69,846.68	132,942
Norwegian	28	54,586.87	101,895
Portuguese	3	297.45	537
American	4	1,531.17	2,750
Japanese	17	63,206.67	122,231
Russian	27	82,648.63	180,419
Dutch	99	194,570.16	360,664
German	178	471,571.05	873,585
Argentine	1	319.05	582
Egyptian	5	4,236.73	10,809
Danish	3	7,562.78	11,856
Ottoman	15	19,119.86	58,354
Greek	2	1,908.74	4,118
Chinese	1	1,463.43	2,645
Total	1,792	4,842,078.17	8,636,920

ETHELBERT WATTS,
Vice and Deputy Consul-General.

CAIRO, *July 27, 1898.*

NOTES.

Commerce of France in 1898.—Commercial Agent Atwell writes from Roubaix, July 18, 1898:

The French customs authorities have just published the following table indicating the foreign commerce of France for the six months ended June 30, 1898. During this period, the importations are valued at $440,996,508 and the exportations at $315,434,697, divided as follows:

Description.	1898.	1897.	Increase.	Decrease.
Importations.				
Food supplies	$152,284,527	$82,082,707	$70,201,820	.....
Manufacturing supplies	227,219,672	231,962,647	.....	$4,742,975
Manufactured articles	61,492,309	58,582,834	2,909,475	.....
Total	440,996,508	372,628,188	68,368,320	.....
Exportations.				
Food supplies	59,368,344	63,286,823	.....	3,918,479
Manufacturing supplies	75,601,472	82,038,831	.....	6,437,359
Manufactured articles	174,942,148	187,447,583	.....	12,505,435
Postal packages	15,522,733	15,908,411	.....	375,678
Total	315,434,697	348,681,648	.....	23,236,951

The increase in imports is caused largely by the heavy importations of wheat during the month of June, the gain during this one month amounting to $21,037,000.

The Staffordshire Potteries.—Consul Bradley sends from Tunstall, under date of July 12, 1898, an extract from the Birmingham Daily Post giving a summary of the condition of the trade of the Staffordshire potteries up to and including June 18, 1898, as follows:

The general condition of the china and earthenware trades of the Staffordshire potteries is very unsatisfactory, and there is no indication of any immediate change for the better. In most branches work is very scarce, short time being pretty general throughout the district, while there has been a large increase in the casually employed and totally unemployed lists. Sanitary pressers, throwers and turners in the electrical department, and encaustic tile makers are the only skilled operatives who continue busy. The American market remains in a most depressed state, and the weekly shipping returns show a serious falling off in the number of packages dispatched to the various American ports. Last week's exports numbered only 881 packages, as compared with 3,409 packages in the corresponding week last year.

From the first of January, the total shipments to the United States numbered 32,106 packages, against 49,605 packages during the same period last year. The home market remains dull, orders being difficult to obtain. Electrical fittings, however, are in brisk demand, and firms producing these specialities continue busy. Business with Australia is improving, and there is a much larger demand for all classes of pottery ware than has been reported for some time past. China goods especially are in large request, and the jet and Rockingham trade is growing. The Canadian market is in a fairly prosperous condition, and china ware in specialties is being freely bought. An average amount of business is being done with other colonial markets; and the Argentine Republic is recovering from the depression lately experienced, orders having been more plentiful during the past week. Business with the Continent is showing further signs of improvement.

Electric Street Railways in Europe.—The following, bearing date of July 11, 1898, has been received from Consul-General DuBois, of St. Gall:

On January 1, 1898, 204 lines of electric street railways with a mileage of 2,259.4 kilometers were in operation in Europe. The rolling stock consisted of 4,514 motor cars.

The following table shows the status of the electric street-railway lines in the different countries of Europe:

Country.	Total length.		Number of motor cars.
	Kilometers.	*Miles.*	
Germany	1,138.2	707.3	2,493
France	396.8	246.5	664
Great Britain	157.2	97.6	252
Switzerland	146.2	90.8	237
Italy	132.7	82.8	311
Austria-Hungary	106.5	66.1	243
Belgium	69	42.8	107
Spain	61	37.9	50
Russia	30.7	19	65
Sweden and Norway	24	14.9	43
Servia	10	6.2	11
Bosnia	5.6	3.5	9
Roumania	5.5	3.4	15
Holland	3.2	1.9	14
Portugal	2.8	1.7	3
Total	2,289.4	1,422.6	4,51

Germany has 65, France 44, Austria-Hungary 13, Great Britain 24, Switzerland 23, and Italy 11 electric street railways.

The system most in use is the overhead trolley, which is operated by 172 lines, while 8 lines have adopted the underground trolley, 8 lines the third-rail system, 13 lines storage or accumulator cars, and 3 lines have a mixed system of overhead trolley and accumulators at certain points of their lines.

These statistics were furnished by the Zurich consulate.

The World's Wine Production.—Consul-General DuBois writes from St. Gall, July 11, 1898:

According to the Moniteur Vinicole, the world's wine production for 1896 and 1897, by countries, was as follows:

Country.	1896.		1897.	
	Liters.	*Gallons.*	*Liters.*	*Gallons.*
France	4,465,600,000	1,179,811,520	3,235,100,000	854,713,420
Algiers	405,000,000	107,001,000	436,800,000	115,402,560
Tunis	9,500,000	2,509,900	9,000,000	2,377,800
Italy	2,157,300,000	569,958,660	2,595,900,000	685,836,780
Spain	1,783,000,000	471,068,600	1,890,000,000	519,338,000
Portugal	328,000,000	86,657,600	250,000,000	66,050,000
Azores, Canary, and Madeira islands	32,000,000	8,454,400	25,000,000	6,605,000
Austria	250,000,000	66,050,000	180,000,000	49,556,000
Hungary	165,000,000	43,593,000	120,000,000	31,704,000
Germany	311,000,000	82,166,200	210,000,000	55,482,000
Russia	290,000,000	76,618,000	250,000,000	66,050,000
Switzerland	150,000,000	39,630,000	125,000,000	33,025,000
Turkey and Cyprus	305,000,000	80,581,000	180,000,000	49,556,000
Greece	215,000,000	56,803,000	120,000,000	31,704,000
Bulgaria	136,000,000	35,931,200	109,000,000	28,797,800
Servia	110,000,000	29,062,000	92,000,000	24,306,400
Roumania	750,000,000	198,150,000	320,000,000	85,544,000
United States	68,000,000	17,965,600	114,700,000	30,303,740
Mexico	7,000,000	1,849,400	6,000,000	1,585,200
Argentine Republic	159,000,000	42,007,800	144,000,000	38,044,800
Chile	173,000,000	45,706,600	280,000,000	73,976,000
Brazil	47,500,000	12,549,500	39,000,000	10,303,800
Cape Colony	9,000,000	2,377,800	19,500,000	5,151,900
Persia	3,200,000	845,440	2,500,000	660,500
Australia	18,000,000	4,955,600	9,100,000	2,404,220
Total production	12,347,100,000	3,262,103,820	10,762,600,000	2,843,478,920

Agricultural Conditions in Bermuda.—Consul Greene writes from Bermuda, under date of August 12, about the great fertility of the island.* Out of a total of 10,642 acres, only 3,000, he says, are under cultivation. He adds:

The ground often yields four crops of different vegetables within a year, but the majority of the farmers are ignorant and shiftless and fail to take advantage of the opportunities afforded by the fertility of the soil. In contrast with this general condition are the estates of the skilled planters. Upon one such estate, 1 acre planted in tomatoes yielded a crop worth $1,500, and an acre of lilies brought a return of $1,800.

The principal exports, which all go to the United States, are onions, tomatoes, potatoes, and lilies. The lily plant, which is the most important of all the productions of the island, is now suffering from a parasitic disease. This has not only attacked the lilies, but

*The full text of the report has been transmitted to the Agricultural Department.

is also seriously affecting the crops of onions, potatoes, and other vegetables. It is receiving careful investigation, but a remedy has not yet been discovered.

Bermuda formerly produced a great number of fruit trees, including the peach, pear, plum, orange, lemon, and others more tropical in their nature. The banana is the only one remaining, the others having perished through disease.

Japanese Steamship Service.—Consul-General Gowey writes from Yokohama, July 12, 1898:

The inclosed clipping is taken from the Japan Mail and furnishes some interesting data concerning the foreign lines of the Japanese Mail Steamship Company:

THE NIPPON YUSEN KAISHA.

We read in vernacular journals that the ships of the Nippon Yusen Kaisha engaged on foreign lines are as follows:

Line.	Sailings.	Number of ships.	Tons.
European	Two sailings per month	10	62,129
American	One and two sailings in alternate months	3	11,918
Australian	....do	3	7,159
Bombay	Two sailing per month	3	10,677
Shanghai	Four sailings per month	3	7,688
Total		22	99,571

It is further expected that during the course of the present year the steamers on the European line will be augmented by two vessels, one of which, with a tonnage of 6,000, left Southampton on July 6 and is expected to reach Japan in September. The Australian service also will soon be increased by three passenger steamers, one of which is expected to reach Kobé before the end of this month.

Trade of Japan in 1898.—Under date of July 12, 1898, Consul-General Gowey sends from Yokohama provisional statistics of the total foreign trade of Japan during the six months ended June 30, 1898, compared with the same period of last year:

Description.	1898.	1897.
	Yen.	*Yen.*
Exports of merchandise	69,647,099	75,071,485
Imports of merchandise	154,840,805	99,041,224
Total exports and imports	224,487,904	174,112,709
Excess of imports over exports	85,193,706	23,969,739

The newspaper from which the above figures were taken adds:

The volume of trade during the past six months of the year is almost equal to that of a single year in the past. The excess of imports over exports is far above that of the preceding year, and it is anticipated that the total at the end of this year will be three times as large as that of the previous year. This is possibly due to the approach of the date of the enforcement of the new customs tariff, the operation of which will undoubtedly stem the tide of imports.

Chinese Decree as to Railway Construction.—The following translation of an imperial decree in regard to the construction of the Lu Kou Chiao–Hankau Railway has been received from Minister Denby of Pekin, under date of July 6, 1898:

[From the Pekin Gazette, June 27, 1898.]

Some time ago, in connection with the building of the Lu Kou Chiao-Hankau Railroad, a company was formed by merchants and we appointed Sheng Hsuan-huai director-general thereof. Two years have now elapsed. A beginning has been made in the work, in so far that the line has been surveyed and land purchased.

This railway involves most important interests, and we do not wish to see the construction thereof delayed. A loan has already been negotiated and Sheng Hsuan-huai is hereby commanded to commence and expedite work at once. He is also commanded to present to us, in a memorial, particulars and details of the work. Should there be any further delay in beginning the building of the line, and any carelessness or neglect shown in this important and essential work, the responsibility will rest with him.

Let all the officials entrusted with the management of the Canton–Hankau line, the Nankin line, and the Shanghai line, in like manner lose no time in commencing work.

An American Civil Engineer in Korea.—Minister Allen sends the following, dated Seoul, July 16, 1898:

Korea has never had a proper survey made of its lands. The Treasury Department knows in a rough manner the extent of tilled fields as they existed a few hundred years ago, but new land brought under cultivation is apt to be known only to the country officials, who draw much of their considerable revenue from taxes on this new land. The people, of course, get no relief, for they will be most thoroughly taxed, whoever gets the money. Taxes are now paid in kind, and land is listed as rice land, which is the best and most profitable, or upland, such as is used for barley, wheat, beans, etc. It has now been decided to have a complete survey made of the whole peninsula, preliminary to a just and proper assessment. An American, Mr. R. Krumm, of Columbus, Ohio, graduate of the Ohio University, has been engaged as chief engineer of the Korean Government "for the direction of all engineering work, such as the laying out of irrigation works, roads, bridges, fortifications, etc."

Mr. Krumm has a five-years contract with the Government at a compensation of $300 per month for the first year, and increasing $50 per month each year. He will also have house and certain expenses furnished. Mr. Krumm is now engaged with the engineering force of the Seoul–Chemulpo Railway.

Effect of Plague on Calcutta Jute Industry.—The following extracts are from a letter from Consul-General Patterson, dated Calcutta, June 14, 1898, addressed to the Philadelphia Museums, to which the original has been forwarded.

The official announcement that plague existed in Calcutta caused great excitement among the native population, not so much from fear of the plague, as on account of the enforcement of the rules to prevent the spread of the disease. About 250,000 people left the city, which, of course, has caused a scarcity of labor; but they are returning, as the city is now quiet, and work will probably go on as usual. So far, some of the heavy bagging looms have been stopped; but, as the operatives prefer to run the Hessian looms, they are all in operation, with the exception of those at one mill, where there is a strike.

The plague is in sporadic form, only 106 cases so far being reported, which is infinitesimal when compared to the population of 800,000.

The planting of jute this year was about a month late, on account of the want of rain, and the weather was unfavorable up to the end of April. In the past three weeks, however, conditions have been excellent, and it is generally estimated that the yield will be about three-quarters of last year's crop, considerably the largest crop on record.

The jute mills of this district are scattered up and down the river a distance of 40 miles, and, should the plague become epidemic in Calcutta, but few of them would be affected by it. Many of the mills, owing to the very low price of jute last season, have stock enough on hand to last them a year. There has been a great expansion in jute manufacturing, and during the past two years there have been mills enough started here to employ 50,000 hands.

Coffin Furniture in Australia.—The following, dated Birmingham July 26, 1898, has been received from Consul Halstead:

Early this week I received a letter from an American doing business in an Australian city, requesting me to furnish him with the

names of those Birmingham manufacturers of "coffin furniture" who are not members of the British coffin-furniture combination or trust.

His business, primarily, is the sale of handles, thumbscrews, name plates, and other metal coffin accessories known to the trade as "hard coffin furniture," of American manufacture. To extend the sale of this line of American goods, he claims he finds it necessary to add "soft coffin furniture," and the Birmingham manufacturer is posted on Australian styles in coffin upholstery and is prepared to furnish exactly what is wanted; and by dealing with someone outside the combination, my correspondent anticipates getting lowest prices. To assist his sale of American "hard" goods, I have obtained and forwarded a list of Birmingham antitrust people who make only the "soft." It might profit some of our manufacturers to get a fashion plate or two, showing coffin upholstery in the Australian style.

Tax on Commercial Agents in Kongo Free State.—The following, dated Brussels, July 18, 1898, has been received from Minister Storer:

By decree of the governor-general of the Kongo Free State, taking effect April 1, 1898, the ordinance of August 29, 1896, is amended to read as follows:

Every private individual, except interpreters, employed within the state domain as commercial agent, traveling salesman, peddler, shopkeeper, etc., shall be subjected to an annual tax fixed at 150 francs ($28.95), unless he has already been included within the regulations concerning direct and personal taxes.* An interpreter is subject to an annual tax of 10 francs ($1.93), unless his employer has already paid tax for him as laborer or home servant.

Bicycle Trade at Tunis.—Consul Grout sends from Malta, under date of August 10, 1898, an extract from a letter received by a business man of that city from a Tunis merchant, as follows:

Cycling in Tunis appears to be hardly developed, it being quite the exception to see a cyclist in the street. The machines sold here are of French make. The wheels are sold on credit against small monthly payments, and the sellers have to warrant them for a certain time and have a repair workshop attached to their store. My frank opinion is that it would not be possible to reckon on a moderate sale of American cycles, unless an American depot, with repair workshop attached, is established and unless the American cycles are much cheaper than the French. The French here are almost the only ones who ride bicycles, and you can

*See "Trade regulations and taxes in Kongo Free State," CONSULAR REPORTS No. 209 (February, 1898), p. 289.

expect them to give preference to the products of their own country where prices are equal. The Arabs hardly ever ride a machine, while the Italian and Maltese population is too poor.

The customs statistics do not show the number of bicycles imported here. The import tariff is 8 per cent ad valorem on French as well as other imports.

Flour Mill at Nantes.—Consul Brittain writes from Nantes, July 21, 1898:

About three years ago, a company of capitalists built a flouring mill in Nantes for the purpose of conducting business on an extensive scale. The plant was operated for a few months, when, owing to some financial trouble between the company and the manager, operations were suspended. Recent efforts of a number of leading business men of Nantes have resulted in reorganizing the company, and within a few months the entire plant will be in operation. The mill is a fine, large, six-story structure, situated on the right bank of the River Loire. It consists of three distinct plants in the main building, each having a capacity of 150 tons of wheat per day, making the combined capacity 450 tons. Vessels of 3,500 tons burden may anchor within 100 feet of the mill, where the grain may be transferred to the elevator, which will soon be erected. A trunk railway line passes within a few feet of the building. Numerous cargoes of wheat have arrived at Nantes and St. Nazaire within the past few months, and the operation of a large milling plant will certainly stimulate the market for grain from the United States. American grain producers wishing further information will do well to correspond with M. Maurice Schowb, 6 Rue Scribe, Nantes.

Swiss Exports to the United States.—Consul-General DuBois writes from St. Gall, July 13, 1898:

During the first six months of last year, the total amount of the exports from Switzerland to the United States was $7,318,500, while during the first six months of the present year the exports amounted to only $6,082,793, showing a decrease of $1,235,707. This large decrease is significant; it is due to the war, the large shipments made early last year to escape the increased duties, and the present custom-house difficulties.

There is now a large amount of goods ready for shipment to the United States, but it will probably remain here until the difficulties concerning actual market value, at present existing in the custom-house at New York, have been settled. I am satisfied that, but for the above-cited obstacles to trade, the exports during the first six months of 1898 would have broken all previous records.

French Duty on Staves and Barrel Heads.—Consul Brittain, writing from Nantes, August 11, 1898, in reply to an American firm which had inquired of him* concerning the duty on staves and heads for glucose barrels imported into France, says he is informed by the customs officials that such duty is 10 francs for each 100 kilograms, or $1.93 per 220 pounds.

Telegraphy Without Wires in Belgium.—Consul Gilbert sends from Liege, under date of July 19, a letter from a professor of a San Francisco school of engineering, who has been investigating inventions in wireless telegraphy. The professor refers to the system of Dr. Della Riccia, connected with the Montefiore Institute of Electricity at Liege. Dr. Riccia has made improvements on apparatus already in use, simplifying it and increasing its power, and claims that he can confine the oscillations of the transmitter to any special point, to the exclusion of all others. In case of communication between war vessels or forts, the message could be transmitted to one alone; in case of fog at sea, the oscillations would not be limited. Dr. Riccia, it is said, can make the presence of a vessel known to another at a distance of 30 miles and telegraph real messages 7 miles. The full text of the report has been transmitted to the War Department.

International Sugar Conference.—Under date of August 5, 1898, Consul Roosevelt, of Brussels, reports that the recent international sugar conference held in that city closed without reaching an agreement upon the question of sugar bounties. Austria-Hungary, Germany, Belgium, and Holland were all in favor of abolition of the bounties, but they were opposed by France and Russia. The conference, being unable to proceed, adjourned upon the understanding that a diplomatic discussion should be carried on between France and Belgium, and, in event of the accomplishment of any tangible result, another meeting should be called.

Aphthous Stomatitis in Belgium.—Consul Roosevelt, of Brussels, under date of July 18, 1898, says:

Several cases of aphthous stomatitis (inflammation of the mouth) have recently been reported at Anderlecht, a suburb of Brussels, and in consequence the communal council of that suburb has decided

* The letter was forwarded to the correspondent September 9, 1898.

to take vigorous steps to eradicate the disease. The sanitary police force specially charged with the surveillance of cattle has been increased, and minute inspection and disinfection of all stables, as well as of railroad cars transporting cattle to market, has been ordered.

Export of Wheat Prohibited in Turkey.—Minister Angell writes from Constantinople, under date of July 28, 1898:

A note from the Porte announces that, on account of local needs, the exportation of wheat from the province of Scutari, in Albania, is forbidden until further notice. This province is in European Turkey.

Tariff Increase in Guatemala.—Under date of August 18, 1898, Consul-General Beaupré sends from Guatemala translation of a decree increasing the duties on imports. The decree reads:

ARTICLE 1. From this date (August 12, 1898), that portion of import duties payable in gold or its equivalent in silver at a rate of exchange fixed by the department shall be 30 per cent.

ART. 2. The addition of 10 per cent specified in the previous article will be collected upon all merchandise, without distinction, which is withdrawn from the custom-house after to-day.

ART. 3. The Department of Accounts will issue and register gold certificates in the quantity necessary, which will be used in the payment of the 10 per cent indicated in this law.

Uruguayan Tariff Committee.—Consul Swalm writes from Montevideo, June 16, 1898:

Congress has appointed a committee to revise the tariff. Advice was requested from a large number of importers, exporters, etc., among whom those who handle American goods are represented. It is safe to believe that American interests in all classifications will have fair consideration.

Foreign Debt of Nicaragua.—Consul Sorsby writes from San Juan del Norte, under date of August 10, 1898:

Referring to my report of May 5,* in which I said that the foreign debt of Nicaragua was about $1,400,000 and that the Government had defaulted two years in interest, I have now to correct this

*See CONSULAR REPORTS No. 215 (August, 1898), p. 530.

statement. The foreign debt of Nicaragua is £284,000 ($1,382,086), and the interest (4 per cent) has been scrupulously and promptly met and paid in full in spite of political troubles and other serious drains upon the resources of the country.

American Mining Enterprise in Haiti.—Minister Powell writes from Port au Prince, August 12, 1898:

A rich vein of iron ore, almost pure metal, has recently been discovered in the northern section of this Republic. A concession has been obtained from the Government to mine the same, and an American company is being formed for this purpose.

Demand for Coal by Brazilian Government.—The Department has received a cablegram from Minister Bryan, dated Petropolis, August 8, 1898, to the effect that the Brazilian Government intends to advertise for 120,000 tons of coal, bids to be opened in October. Mr. Bryan desires that United States exporters should be informed of this opportunity.

Coal Imports into Brazil.—In reply to an inquiry from an export firm (to which the original letter was forwarded), Consul Furniss writes from Bahia, July 14, 1898:

The imports of coal at Bahia in 1897 amounted to 78,000 tons (of 2,240 pounds). Large quantities were taken by the Bahia and San Francisco Railroad and by the Government gas works. All the coal was from Cardiff and Newcastle, the former being used for steam purposes and the latter for gas. No anthracite is imported; bituminous coal is used for all purposes. The average wholesale price is 37s. ($8.99) per ton. Vessels bringing coal discharge it free of expense to purchaser into lighters. Lighterage costs on an average 3 to 5 milreis (42 to 70 cents) per ton. The duty on coal is 2¼ milreis (31½ cents) a ton. There are no coal mines in this consular district.

Market for Smoked Meats in Canada.—Consul Martin writes from Amherstburg, August 19:

At the present time, I believe quite a trade in smoked meats could be had with at least this portion of Canada by the packers of the

United States. Bacon and hams are being retailed here at 15 and 16 cents per pound, and the retailers claim that they are paying 12½ to 13 cents per pound. The duty is 2 cents per pound. I notice the jobbing price in the United States is 8¼ to 8½ cents per pound.

Exporting Raspberries from Canada.—On August 10, Commercial Agent Beutelspacher sent word from Moncton that a Canadian canned-goods packer was about to try the experiment of shipping raspberries to England. They will be packed in 10-pound round tins, and the initial shipment will consist of five carloads. The country produces many thousand pails of wild raspberries, the kind to be used in the intended shipment.

If the experiment, says Mr. Beutelspacher, proves successful in Canada, would it not be equally so in the United States?

Distress in the Klondike.—Consul McCook writes from Dawson City, under date of August 4, 1898, that prices for provisions are very high (exceeding by 25 per cent those of last year), and lodging is hardly to be had at any price. Outsiders, he says, can not realize the conditions; destitution and suffering is imminent for many unfortunate prospectors, who are unable to get away. No one, he continues, should go to the gold fields without a couple of thousand dollars and supplies for two years. The output of gold has been exaggerated fivefold.

Commercial Institute in Vladivostock.—Consul Smith writes from Moscow, July 4, 1898:

An institute is to be opened in Vladivostock in July, 1899, for the benefit of students. Special instruction will be afforded in commercial and industrial lines. All scholars who have passed the ordinary course of classes in the middle schools will be accepted without examination. The term of preparation will last five years, and there will be three divisions: Chinese-Japanese, Chinese-Korean, and Chinese-Mongolian.

Camphor in Japan.—Consul-General Gowey sends from Yokohama, under date of July 11, 1898, the following newspaper clipping:

THE PRODUCTION OF CAMPHOR.

The production of camphor in Miyazaki, Kagoshima, Oita, and Wakayama prefectures, which amounted to 4,000,000 kin* (5,333,333⅓ pounds) in 1894 and 1895—

*1 kin=1⅓ pounds avoirdupois.

the price being quoted at from 90 to 100 yen ($47.69 to $52.99) per picul (133⅓ pounds)—has been considerably reduced of late. This year's output so far only amounts to 1,200,000 kin (2,133,333⅓ pounds), quoted at from 41 to 43 yen ($21.70 to $22.75) per picul. This decline is evidently due to the growing dearth of camphor trees, while the rate of wages and the expense of manufacture in general have been greatly increased of late. Under these circumstances, most of the local manufacturers have suspended work and have abandoned the field almost entirely to the Formosan product, which is the best to be found in Japan.

Japanese Silk Exports.—Under date of July 11, 1898, Consul-General Gowey, of Yokohama, transmits figures as to the exports of silk from Yokohama prepared by Mr. George H. Allcock, a silk inspector of Yokohama, as follows:

To—	1893–94.	1894–95.	1895–96.	1896–97.	1897–98.
	Bales.	*Bales.*	*Bales.*	*Bales.*	*Bales.*
England	250	50	277	30	2
The Continent	24,425	22,601	25,213	23,137	19,732
United States	19,342	28,745	29,284	25,382	37,019
Total	44,017	51,396	54,774	48,549	56,753

Freight Rates for South African Exhibition.—Consul-General Stowe, of Cape Town, under date of June 27, 1898, says:

By request of the officers of the exhibition to be held at Grahamstown, Cape Colony, December 15, 1898, to January 21, 1899, I wish to ask that the steamship companies trading between the United States and South Africa be requested to make special rates of freight on exhibits to the above-named exhibition, and that manufacturers and producers of the United States be notified by said steamship companies in the usual way.

Vehicles in Cape Colony.—Consul-General Stowe, in a communication dated Cape Town, July 4, 1898, says that efforts are being made to have the duties on vehicles imported into that colony increased. At a recent meeting of carriage manufacturers, reference was made to American competition, and it was stated that the colonial vehicle was better made and more solid than the imported article. A deputation was formed to urge the claims of the local industry upon the premier. There are twenty-three manufacturers of vehicles in Cape Colony.

Russian Petroleum for Spain.—Under date of July 4, 1898, Consul Smith, of Moscow, says that Spanish vessels which formerly took cargoes of kerosene from the United States are now obtaining supplies from Russia, large steamers having been sent to Batum for that purpose.

Subsidies of the French Line of Steamers (Correction).—Under date of September 8, Consul Thackara, of Havre, writes:

In reading the ADVANCE SHEETS OF CONSULAR REPORTS, I find that in the sixth, twelfth, twenty-third, and twenty-fifth lines of a report made by me on the "Subsidies of the French line of steamers," the term "nautical mile" should have been printed "nautical league."

The error was due to the consul's report, as "mile" was written therein in every case noted.

Consular Reports Transmitted to Other Departments.—The following reports from consular officers (originals or copies) have been transmitted since the date of the last report to other Departments for publication or for other action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
C. E. Turner, Ottawa.....	July 29, 1898	Customs duties on sporting outfits.	Treasury Department.
E. Schneegans, Saigon.....	July 5, 1898	Rice market.....	Department of Agriculture.
C. W. Martin, Amherstburg.	Aug. 17, 1898	Crop report.....	Do.
E. H. Plumacher, Maracaibo.	July 12, 1898	Cultivation of the Yucca plant.	Do.
R. S. S. Bergh, Gothenburg.	Aug. 1, 1898	Crop prospects.....	Do.
A. G. Seyfert, Stratford.....	Aug. 1, 1898	Agricultural report for July..	Do.
E. Schneegans, Saigon.....	June 7, 1898	Rice market.....	Do.
A. M. Thackara, Havre.....	July 14, 1898	French wheat crop, 1898.....	Do.
A. B. Johnson, Amoy.....	July 6, 1898	Tea consumed in America...	Treasury Department.
W. M. Greene, Bermuda...	Aug. 12, 1898	Agricultural report.....	Department of Agriculture.
E. C. Cramer, Florence.....	Aug. 8, 1898	Salted-meat dealers and American competition in Florence.	Do.
J. A. Barnes, Cologne.....	Aug. 9, 1898	Preparation of American fruits for German market.	Do.
H. C. Morris, Ghent.....	Aug. 30, 1898	Flemish harvest in 1898.....	Do.
M. H. Twitchell, Kingston (Ontario).	Aug. 31, 1898	Agricultural report.....	Do.
E. Schneegans, Saigon.....	July 19, 1898	Rice market.....	Do.

FOREIGN REPORTS AND PUBLICATIONS.

Commercial and Industrial Conditions in the Philippines.—The following extracts are from the Bulletin de la Société de Géographie Commerciale, Paris, vol. xix, No. 4. Speaking of the market for European goods, the writer says:

French canned goods, while appreciated for their good qualities, are undersold by English and Spanish articles. The Germans sell only canned vegetables. A Swiss establishment has recently begun selling pates de foie gras, sauerkraut, and preserved vegetables. Australia is now sending large quantities of butter and meat. Wine and whisky do not sell readily, on account of the competition of local manufacturers.

There is a good market for jewelry, especially in the provinces, in inexpensive articles. The French have a good place in this line, although the Germans and Swiss are competing seriously. American watches and jewelry in white metal are also becoming known. The profits in this branch are enormous; watch pins bought in Europe at 7 francs ($1.35) per dozen sell here at $3 Mexican ($1.33 *) apiece. The same is true of many other articles.

Textiles of cotton, silk, linen, etc., would find an important market here if they were adapted to the taste of the millions of inhabitants of these islands.

Shoes are an important item of importation; they represent over 1,500,000 francs ($289,500) annually, and come chiefly from Austria, Germany, and (since 1895) from Spain. All articles pertaining to carriages are well received. Chromos, engravings, religious objects, etc., have a large sale among the Indians and half-breeds.

The glassware sold at Manila is mostly of the most ordinary class, and is supplied by England, Germany, and China. French perfumery and drugs are sold universally. Olive oil comes from Spain, and dried fruits, which are largely consumed, are sent by Spain, Italy, and China.

Besides the above-mentioned articles, England, Germany, and Belgium export to the Philippines a considerable quantity of iron, zinc (worked and unworked), machines of all sorts, and firearms; as well as hardware, nails, and other small articles of iron, which sell at remunerative prices.

In regard to the resources of the islands the article continues:

The land is wonderfully productive, but lacks intelligent cultivation. So wasteful have been the methods that, in spite of the wonderful fertility of the soil, the harvests have in some places diminished. This is true of maize in the Island of Cebu and of sugar cane in the province of Pangasinan, where new plantations must now be made every year, while at Negros the land yields many times in succession. The rice production, formerly so large, has so fallen off that importations have been found necessary. To give an idea of what the archipelago has suffered in this

* According to the estimate, April 1, 1898, of the United States Director of the Mint.

respect from the negligence of its inhabitants, the following table, showing the imports of rice into the Philippines for a certain number of years, has been compiled:

	Pounds.
1881	12, 253, 166
1882	20, 754, 104
1883	119, 365, 862
1890	157, 157, 763
1891	160, 195, 654
1892	138, 247, 863

There are two kinds of rice in the islands—hill rice and plain rice—although these two varieties might be infinitely subdivided according to quality, shape, size, etc. This is the principal food of man and animals. Very little work is necessary in its cultivation, and it is astonishing that the natives have not produced larger quantities, instead of deriving their supplies from Japan and China. The method of cultivation is as follows: At the end of April the ground is worked and divided into large squares. One of these is used as a seed plot, and the work is continued on the others. After three or four days, the ground is harrowed, and the seed, after being soaked in water for at least two hours, is planted. The ground must not be allowed to become too dry or too wet in the interval before transplanting, which usually takes place in June, when the plants are from 4 to 7 inches high. Women and children then carefully lift the young plants and carry them to adjacent squares, similarly prepared, where other women place them in rows about 8 inches apart. During the period of growth each square is left open, in order that the water may freely enter, and it is only when the plant becomes yellow that the ground is allowed to dry. The plants are again watered and are gathered by men by means of primitive sickles.

The production of cotton is also diminishing, for the same reasons that apply to rice. It grows in the provinces of north and south Ilocus, Union, Abra, and Pangasinan. The kinds cultivated are *Gossipium harbaceum* and *Bomba pentandrum*. The ground is almost never prepared, and the cotton is silky in quality and would easily become a valuable product if attention were given to the cultivation. In the two provinces of Ilocus, too great humidity is not to be feared for this plant, for the season of rain is well defined here, from June until October; and the land is adapted to its cultivation. Nevertheless, the indolence of the Indians has caused cotton to take an inferior rank among the products of the colony.

Hemp is the most important product, and is obtained from the trunk of a species of banana tree, the fruit of which is not comestible. The tree, which attains a height of from 22 to 26 feet, is cultivated in the following manner:

The ground is worked carefully, the best period being from June to October; it is well irrigated and divided into squares of about 13 feet. Earth that has clay on the surface and limestone below is well adapted for the purpose. The seeds are planted two and two in little holes 5 to 7 inches apart and covered with earth and straw, the latter being set on fire to aid in the germination. The ground is irrigated before sunrise for several days, and care is taken to destroy all insects. When the plants are about the size of three fingers they are transplanted. The sprouts during the heat of the day, *i. e.*, from 10 to 3 o'clock, are sheltered from the rays of the sun. After the third year, the plants yield every eight months. Some producers plant sweet potatoes between the rows of bananas. This vegetable is largely consumed in the islands, and its roots destroy the weeds that grow so rapidly in these climates. The potatoes, however, must be protected against the boars, which are very fond of this vegetable.

The production of sugar is gradually developing. When the cultivation of this product was begun, elevated lands were chosen, not only to avoid the excess of humidity, but also because the low-lying land was occupied with rice and maize. The sugar plantations were established on the hills, which necessitated additional labor and longer transportation. Rats have caused serious damage, and the lack of labor and of capital have been additional obstacles to the progress of the industry. Sugar is planted in March and April in order to have the cane of good size by the rainy season. Two sorts are found in the Philippines—one of green and the other of reddish color. The product goes to Japan, England, and the United States. The price is very low. The principal centers of production are the provinces of Batangas, Pampanga, Ilocos, Pangasinan, and Bulacan; also, Iloilo and the islands of Cëbu and Negros.

Tobacco alone would make a fortune for the Philippines, although it must be admitted that the quality has deteriorated of late years on account of the lack of good management. A large number of companies have been formed for the exploitation of this industry. The two most important are the "Compagnie Générale des Tabacs des Philippines," the capital of which ($14,500,000 gold) is principally in the hands of French bondholders, and the "Insular." Each of these establishments employs from 5,000 to 6,000 workmen.

The native coffee has a fine aroma. It grows in the provinces of Batangas, Cavite, and Zamboanga, and is exported chiefly to Spain. The cocoanut tree grows abundantly and seems made to order for these countries, where the people are averse to exertion. Cocoanut oil is used for lighting the houses and streets of certain provinces where electricity or petroleum are as yet unknown.

The native indigo is famous for its excellent quality. Several years ago, the provinces of Ilocos, Pangasinan, Pampanga, and Camarines produced enormously. Unfortunately, the faulty preparation and the adulteration on the part of the Chinese traders to which the powder was subjected have greatly reduced its market value. It is exported chiefly to Japan.

Cacao is produced in the provinces of Leyte, Bohol, Misamis, Cëbu, Negros, and Samar; that of Cëbu and Negros, especially, can rival the best of America. On account of the laziness of the Indians, all the product is locally consumed.

A species of dyewood, which resembles logwood and is called sibucao, is produced in the country and exported to England and China. Among the other products of the country are ihlang-ihlang, wax, mother-of-pearl, straw hats, rattan, etc. These have, however, a secondary importance.

Besides the numerous tobacco establishments, to which reference has already been made, there are in Manilla rice factories, sugar mills, distilleries, factories of cord, carriages, soap, aërated waters, brickyards, sawmills, printing establishments, as well as repair shops, Chinese houses where cheap furniture, shoes, etc., are made, and the numerous little industries which belong to a large city. The purely native industries consist of work in bamboo and cotton, engraving, and making straw hats. The women have long and slender fingers, fine and sensitive, and the hats and cigarette holders they make, their work on pineapple cloth, and the articles they embroider are models of delicacy. The manufacture of cotton goods often forms the occupation of an entire village, and the industry is far from being of insignificant proportions. Artificial incubation, however, is perhaps the industry most peculiar to the Philippines. The apathy of the natives adapts them to this occupation, in which, however, only those who are old or crippled are employed. They lie on soft beds, the eggs being placed around their bodies, and maintain this position until the eggs are hatched. Ducks are raised in large quantities.

Traffic in Panama in 1895 and 1896.—The Moniteur Officiel du Commerce, Paris, March 17, 1898, says:

The merchandise in transit via the Isthmus of Panama during the year 1896 was greater than that of the preceding year. There was also an increase in the number of passengers. In 1895, the merchandise transported between Colon and Panama amounted to 271,063 tons; in 1896, to 297,197 tons. Details of the traffic are as follows:

Description.	1895.	1896.	Increase.	Decrease.
From Colon to Panama.	*Tons.*	*Tons.*	*Tons.*	*Tons.*
From New York to San Francisco	27,000	22,565	.....	4,435
From New York to Panama, South America, Central America, and Mexico	24,308	28,852	4,544	.....
From Europe to Panama, South America, Central America, Mexico, and San Francisco	81,686	92,137	10,451	.....
Local merchandise from Colon to Panama	16,987	36,922	19,929	.....
Total	149,987	180,476	30,489	.....
From Panama to Colon.				
From San Francisco to New York	30,432	13,098	.....	17,334
From San Francisco to Europe	2,062	.....	.....	2,062
From South America, Central America, Mexico, and Panama to New York	17,308	20,602	3,295	.....
From South America, Central America, Mexico, and Panama to Europe	66,943	56,071	.....	10,872
Local merchandise from Panama to Colon	4,331	8,949	4,618	.....
Total	121,076	98,721	8,134	22,355
Grand total	271,063	279,197	.....	.....

Countries of origin and destination.

Country.	1895.	1896.	Increase.	Decrease.
From Colon to Panama.	*Tons.*	*Tons.*	*Tons.*	*Tons.*
For Panama	24,060	47,568	23,508	.....
For Central America	62,083	65,551	3,468	.....
For South America	29,383	39,387	10,004	.....
For San Francisco	30,213	24,411	.....	5,802
For Mexico	4,248	3,559	.....	689
Total	149,987	180,476	30,489	.....
From Panama to Colon.				
From Panama	6,933	22,688	15,755	.....
From Central America	55,445	39,779	.....	15,666
From South America	24,742	21,173	.....	3,569
From San Francisco	32,494	13,103	.....	19,391
From Mexico	1,462	1,978	516	.....
Total	121,076	98,721	.....	22,355
Grand total	271,063	279,197	8,134	.....

The decrease in the merchandise from the different countries of the Pacific coast is due to the competition between the Panama Railway and German steamships, which take freight destined for Europe at a reduced price from the different ports of Central and South America by way of the Strait of Magellan.

Diamond Exports from South Africa.—From the Statistical Register of the Colony of the Cape of Good Hope for the year 1897, the following statistics are taken:

The declared quantity and value of diamonds exported from the Colony of the Cape of Good Hope, including the produce of the Orange Free State, during the quarters ended March 31, 1896, 1897, 1898, respectively, were as follows:

Year.	Carats.	Value.
1896	830,700	$5,228,801
1897	950,739	5,848,847
1898	876,179	5,444,514

The fluctuations of the diamond output and the value per carat since 1890 are shown by records of the Kimberley mines. During this period, the highest average paid per carat was in February, 1890 (£1 19s. 5d. or $9.59), and the lowest was in July, 1893 (£1 1s. 5d, or $5.21). The average for the year 1897 was £1 4s. 11⅞d. ($6.08) per carat. The river stones realized on an average £1 19s. 9⅞d. ($9.69).

The total number of carats exported in 1897 from these mines was 3,485,333, valued at $21,676,776, of which 12,353 carats went to Belgium. Four mines in the Kimberley division cover 156 acres and employ 8,588 workmen, of whom 1,646 are white and 6,942 are colored. Five other mines in the Kimberley division employ 1,829 workmen—251 white and 1,578 colored. The weekly wages in these mines averaged, in 1897, £3 12s. to £6 ($17.51 to $29.20).

Foreign Capital in Japan.—In the Revue du Commerce Extérieur, Paris, July 16, 1898, the following appears:

The firm Peacok & Co., London, has recently advanced 15,000,000 yen ($7,470,000) to a Japanese company formed to build a railway in the Island of Formosa. The company is to buy all of its locomotives from England. The capital is 10,000,000 yen ($4,980,000). This is the first time that a foreign company has interested itself to this extent in a Japanese enterprise. There is, however, a marked movement in favor of introducing foreign capital into Japan; the question has even been discussed by the chambers of commerce, and business men generally understand that Japan is not ablé to develop her industries with her own resources. Heretofore, the Japanese Government has not encouraged this movement; but, when the new treaties come into force next year, nothing can prevent foreign companies from being organized in Japan. At present, several Japanese railway companies are trying to borrow capital in Europe to the amount of 20,000,000 yen.

Finances of Spain.—A British Foreign Office report (Annual Series 2179) by Mr. Harrison, commercial attaché at Madrid, says that the budget for 1898–99 received the royal assent on June 28, 1898. The Spanish Minister of Finance says that, in spite of the present critical circumstances, there is no decrease in the national wealth or in the receipts of the national exchequer. He recognizes

the excessive amount of the floating debt, but points out that in the present critical situation, when it is impossible to foresee the full extent of the burdens imposed by the war, any consolidation scheme would be imprudent. At the present time, it is only possible to propose a temporary solution of the financial difficulties, and the main object of the budget for the coming year is to supply the exact amount necessary to meet ordinary expenditure, so as not to increase the floating debt.

The budget of 1896–97, continues Mr. Harrison, showed a surplus of 13,455,787 pesetas ($2,596,966).* During the following year, 1897–98, there was a large increase in expenditure, in the service of the interest and sinking fund on the 800,000 customs bonds issued November 3, 1896, and 400,000 customs bonds issued May 8, 1837, requiring the sum of 91,911,018 pesetas ($17,738,826). To meet this sum, a surcharge of 10 per cent on direct and indirect taxes was established, and loans based on a petroleum monopoly and from the explosive monopoly company were proposed. The last two measures failed, and the customs receipts diminished, causing a serious deficit in the budget. The probable liquidation of the budget for 1897–98 is given as follow:

Description.	Expenditure.		Revenue.	
	Pesetas.		*Pesetas.*	
Probable result of budget for 1897–98	834,459,788	$161,050,739	751,315,545	$145,003,900
Balance from closed budgets	21,218,834	4,095,235	54,942,481	10,603,899
Total	855,678,622	165,145,974	806,258,026	155,607,799

The budget therefore shows a deficit of 49,420,595 pesetas ($9,538,175).

The extraordinary budget created on August 30, 1896, and modified June 10, 1897, consisting of a loan from the tobacco company, a loan granted on the Almaden mines, and returns from the tax on navigation, again failed to realize the revenue estimated, and it has been found necessary to extend the period it is to remain in force.

The ordinary budget for the year 1898–99 contained the following estimates:

Description.	Amount.	
	Pesetas.	
Expenditure	868,479,422	$167,616,528
Revenue	855,816,890	167,102,660
Deficit	2,662,532	513,868

*The report throughout gives the equivalent of the pesetas in pounds sterling. In each case this has been substituted by United States currency, the reductions having been made according to the valuation of the United States Director of the Mint—*i. e.*, 1 peseta=19.3 cents.

The Government, it is stated, was anxious to reduce the expenditure to the estimates of the budget for 1896–97. This was found to be impossible, as, in addition to the deficit for the financial year just closed, a considerable increase in expenditure had to be considered.

The following tables show the estimates for the year 1898–99 as compared with the budget for 1896–97:

Estimates of expenditure.

Description.	1898–99.		Difference from 1896–97.	
State expenditure.	*Pesetas.*		*Pesetas.*	
Civil list	9,250,000	$1,785,250	— 250,000	— $18,250
Legislature	1,638,085	316,150	+ 19,724,656	+ 3,806,858
Public debt:				
Budget debt	337,937,331	65,221,905	+ 61,299,346	+11,830,774
Incidental expenditure	61,299,346	11,830,774	.....	.....
Justice	1,614,651	311,618	+ 150,793	+ 29,103
Pensions	61,749,730	11,917,698	+ 5,535,000	+ 1,068,255
Total	473,489,143	91,383,395	+ 86,459,795	+16,686,740
Departmental expenditure.				
Presidency of Council of Ministers	980,833	170,001	+ 95,083	+ 18,351
Ministry of State	4,935,919	952,632	+ 221,407	+ 42,732
Ministry of Grace and Justice:				
Civil	13,772,101	2,658,015	+ 333,545	+ 64,374
Ecclesiastical	40,976,548	7,908,474	+ 330,682	+ 63,822
Ministry of War	145,929,521	28,174,398	+ 5,695,460	+ 1,199,224
Ministry of Marine	25,190,539	4,861,774	+ 1,756,599	+ 339,024
Ministry of Home Department	28,381,198	5,477,571	+ 975,591	+ 188,289
Ministry of Public Works	80,728,570	15,580,614	+ 2,543,935	+ 490,979
Ministry of Finance	18,659,467	3,601,277	+ 2,531,254	+ 488,532
Collection of taxes, etc.	34,560,528	6,670,182	+ 6,121,463	+ 1,171,442
Colony of Fernando Po	875,000	168,875	.....	.....
Grand total	858,479,367	167,607,208	+107,064,814	+20,623,509

Estimates of revenue.

Description.	1898–99.		Difference from 1896–97.	
	Pesetas.		*Pesetas.*	
Direct taxes	297,360,810	$57,390,636	+ 1,420,000	+ $274,060
Indirect taxes	305,273,000	58,917,689	— 82,000	— 15,826
Monopolies	132,696,024	25,610,333	+ 4,591,024	+ 887,068
State property:				
Rents	21,069,056	4,066,328	+ 2,601,605	+ 502,110
Sales	3,718,000	717,574	— 500,000	— 96,500
Resources of treasury:				
Ordinary	17,200,000	3,319,600	.....	.....
Extraordinary	88,500,000	17,080,500	+88,500,000	+17,080,500
Total	865,816,890	167,102,660	+96,530,629	+18,630,411

For the purpose of providing additional revenue, the new budget sanctions the continuance of the transitory surcharges created in June, 1897, on all direct and indirect taxes; the tax on petroleum,

gas, and electric light; the additional war surcharge, the export tax, and the stamp tax. In the law of May, 1898, providing ways and means for the war, the Government was granted power to make use of the national credit in any manner determined by the Council of Ministers; to authorize the Bank of Spain to expand its note issue; to negotiate for the advance of one year's rent on the tobacco, match, explosive, and salt monopolies; to create a new issue of treasury bills; and to convert the exterior debt into the interior debt.

In regard to the means resorted to by the Government to carry on the Cuban campaign, Mr. Harrison gives the following table of securities which have supplied the necessary resources:

Description.	Nominal value.	
	Pesetas.	
Cuban bonds of 1890 (partly)	875,000,000	$169,875,000
Customs bonds:		
November, 1896	400,000,000	77,200,000
May, 1897	200,000,000	38,600,000
January, 1898	200,000,000	38,600,000
Delegations on security of revenue from stamp tax, tobacco monopoly, and tax on articles of food (April, 1898)	225,000,000	43,425,000

The bonds of May, 1897, and January, 1898, were not negotiated, but pledged to the Bank of Spain as security for advances, and no provision is made in the budget for their service in respect of interest and redemption.

The "delegations" were also not for public negotiation, but were discounted by the Bank of Spain. They are to mature in one year and constitute a first charge on the stamp tax, tobacco-monopoly rent, and the tax on articles of food.

CONTENTS.

		Page.
I.—Financial Conditions in Chile	*Wilson*	321
II.—Coffee Crop of Brazil	*Seeger*	334
III.—Resources of Brazil	*Seeger*	337
IV.—Bids for Coal in Brazil	*Bryan*	340
V.—American Coal in Foreign Countries	*Halstead*	343
VI.—Coal Strike in South Wales	*Phillips*	345
VII.—Bicycles in Scotland	*McCunn*	347
VIII.—France as a Market	*Brunot*	349
IX.—Trade Openings in France	*Covert*	350
X.—American Machinery in Denmark	*Blom*	352
XI.—United States Shoes in Germany	*Warner*	352
XII.—American Apples in Germany	*Monaghan*	353
XIII.—German Objections to American Fruit	*Barnes*	354
XIV.—American Commission Houses in Germany	*Barnes*	355
XV.—United States Trade with Greece	*McGinley*	356
XVI.—Faults of American Trade Methods	*Halstead*	359
XVII.—Traveling Agents and Foreign Languages	*Warner*	361
XVIII.—Germany's Export Unions	*Monaghan*	363
XIX.—Germany's Export Trade	*Harris*	363
XX.—German Exports to United States	*Warner*	364
XXI.—Decrease of French Exports	*Gowdy*	366
XXII.—Sample Bureau in Stuttgart	*Ozmun*	367
XXIII.—German Trade with Russia	*Monaghan*	369
XXIV.—Commercial Education at Gera	*Warner*	370
XXV.—Openings in South Africa	*Stowe*	372
XXVI.—Government Supplies for Cape Colony	*Stowe*	373
XXVII.—Cape Colony's Imports and Exports	*Stowe*	376
(Roofing Slates, 377; Tobacco, 377; Freight Rates, 378; Shipping of American Freight, 379.)	*Stowe*	
XXVIII.—Agriculture in Natal	*Stowe*	380
(Agricultural Implements, 381.)	*Stowe*	
XXIX.—Watches and Clocks in Arabia and South Africa	*Cunningham* / *Stowe*	382 / 382
XXX.—Business Houses in Erzerum	*Bergholz*	383
XXXI.—The World's Supply of Wheat for Bread	*Halstead*	385

gas, and electric light; th
tax, and the stamp tax. I
and means for the war, th
use of the national credit
of Ministers; to author
issue; to negotiate for t
match, explosive, and
treasury bills; and to
debt.

In regard to the r
on the Cuban campa
securities which hav

Cuban bonds of 1890 (pa
Customs bonds:
November, 1896.....
May, 1897.....
January, 1898.....
Delegations on secur
and tax on articles

The bond
but pledge
provision is
and redem

The "
discounte
and con
rent, an

Page.

LXXIII.—Floating Exposition of Austria.....*Atwell* 454

LXXIV.—American Furniture in South Africa..... 456

LXXV.—Advice to United States Exporters..... *Stowe* 457

LXXVI.—Windmills in South Africa..... 458

LXXVII.—Notes (American Wire Nails in Europe—American Roofing Slates in Denmark—American Canned Goods in Denmark—Demand for Dovetailing Machines in France—Dried Apples and Staves in France—Ivory in Antwerp—Commercial Conditions at Barmen—New Cruisers in Stettin—War Vessels of German Build—Electric Roads in Germany—Higher Education in Saxony—Workingmen's Houses in Germany—Condition of Labor in Belgium—New Canal in Germany—Coal as Motive Power in Germany—Beet Cultivation in Russia—Flax and Hemp Crop of Russia—Hop Crop in Great Britain—Co-operative Cheese Association in Belgium—Danish-American Steamship Service—Kyao-chau Declared a Free Port—Electric Lamps in Yokohama—Japanese Fur-Seal Industry—Americans in China—Need of Commercial Directories in China—American Enterprise in British Honduras—Mining in Canada—Tariff Changes in the Argentine Republic—Additional Import Tax in Uruguay—Increase of Duties in Nicaragua—New Tariff and Harbor Regulations in Japan—Commercial Code and Treaties in Japan—Railway Material Wanted in Australia—Jute Crop of India for 1898—New Railroad in Mexico—High Price of Coal in France—Adjustment of Trade Differences with Germany—Large Hay Crop in Germany—Opposition to American Pork in Italy—Animals in Switzerland—Poultry and Eggs in Russia—Women Employed in German Trade—Treatment of Tetanus by Cerebral Injection—Branch Post-Offices in Brussels—Telephone between Berlin, Brussels, and Paris—Entry of Jews into Palestine Prohibited—Consular Reports Transmitted to Other Departments)..... 460

LXXVIII.—Foreign Reports and Publications (Mines and Industries in Peru—Tariff Changes in Russia—Production of and Trade in Ivory—American Agricultural Machinery in England—Petroleum in Dutch India)..... 477

REPORTS BY COUNTRIES.

	Page.
ARABIA:	
Watches and clocks in	382
ARGENTINE REPUBLIC:	
Tariff changes in	471
AUSTRALIA:	
Railway material wanted in	472
AUSTRIA:	
Floating exposition of	454
BELGIUM:	
Branch post-offices in Brussels	475
City taxes in	438
Condition of labor in	465
Cooperative cheese association in	467
Ivory in	462
Savings and pension bureau in	437
Telephone between Berlin, Brussels, and Paris	476
BRAZIL:	
Bids for coal in	340
Coffee crop of	334
Resources of	337
BRITISH COLUMBIA:	
Industrial and commercial enterprises in	430
BRITISH HONDURAS:	
American enterprise in	470
CANADA:	
Dawson City and the gold fever	432
Mining in	471
CAPE COLONY:	
Freight rates to	378
Government supplies for	373
Imports and exports of	376
Shipping of American freight to	379
CHILE:	
Financial conditions in	321
CHINA:	
Americans in	470
Belgian enterprise in	400
Hints for exporters to	405
Kyao-chau declared a free port	468
Need of commercial directories in	470
New conditions of trade in	443
Official newspaper in	407
Patents and copyrights in	396
Russia in the markets of	397

CHINA—Continued. Page.
The Pekin-Hankau Railway contract..... 401
Treatment of missionaries in..... 406
CHINA, NORTH:
United States trade in (correction)..... 441
CUBA:
Cuban sugar competition..... 421
DENMARK:
American canned goods in..... 461
American machinery in..... 352
American roofing slates in..... 460
Danish-American steamship service..... 468
ENGLAND:
Faults of American trade methods..... 359
Steam turbine in..... 450
The world's supply of wheat for bread..... 385
Trade of Newcastle..... 435
EUROPE:
American wire nails in..... 460
FRANCE:
As a market..... 349
Decrease of exports of..... 366
Demand for dovetailing machines in..... 461
Dried apples and staves in..... 462
High price of coal in..... 473
Trade openings in..... 350
Treatment of tetanus by cerebral injection..... 475
GERMANY:
Adjustment of trade differences with United States..... 473
American apples in..... 353
American commission houses in..... 355
Coal as motive power in..... 466
Commercial condition at Barmen..... 462
Commercial education at Gera..... 370
Export trade of..... 363
Export unions of..... 362
Exports to United States..... 364
Electric roads in..... 464
Importance of good seed in sugar-beet cultivation..... 451
Large hay crop in..... 474
New canal in..... 466
New cruisers in Stettin..... 463
Objections to American fruit in..... 354
Sample bureau in Stuttgart..... 367
Strikes in 1897..... 433
Trade with Russia..... 369
Traveling agents and foreign languages..... 361
United States shoes in..... 352
War vessels of German build..... 463
Women employed in German trade..... 475
Workingmen's houses in..... 465
GREAT BRITAIN:
Hop crop in..... 467

	Page.
GREECE:	
United States trade with	356
GUADELOUPE:	
Charter parties for	424
New duties in	424
HAITI:	
Industrial conditions in	428
HUNGARY:	
Artificial mineral waters in	434
INDIA:	
Jute crop for 1898	473
ITALY:	
Opposition to American pork in	474
JAPAN:	
American butter in	419
Commercial code and treaties in	472
Electric lamps in Yokohama	469
Fur-seal industry of	469
Glass industry in	418
New tariff and harbor regulations in	472
Tea trade of Formosa	415
KOREA:	
Educational institutions and methods in	408
MEXICO:	
New railroad in	473
MEXICO, SOUTHERN:	
Natural resources of	422
NATAL:	
Agricultural implements in	381
Agriculture in	380
NETHERLANDS:	
Emigration from Amsterdam during 1897	440
NEW CALEDONIA:	
Pearls in	418
NICARAGUA:	
Increase of duties in	472
PARAGUAY:	
Butter in	420
PHILIPPINES:	
Business points for United States merchants in the	446
RUSSIA:	
Beet cultivation in	466
Distilling industry in	389
Failure of harvest in	388
Flax and hemp crop of	467
Freight traffic on railroads in	391
Patents in	393
Poultry and eggs in	474
SALVADOR:	
New tariff rates in	426
SAXONY:	
Higher education in	464

	Page.
SCOTLAND:	
American iron pipes in	448
Bicycles in	347
United States bicycles in	448
SOUTH AFRICA:	
Advice to United States exporters	457
American furniture in	456
Openings in	372
Watches and clocks in	382
Windmills in	458
SOUTH WALES:	
Coal strike in	345
SWITZERLAND:	
Animals in	474
Horses and cattle in	436
TURKEY:	
Business houses in Erzerum	383
Entry of Jews into Palestine prohibited	476
URUGUAY:	
Additional import tax in	471
Trade of, during 1897	427
VENEZUELA:	
The yucca plant in	481

Full directions for binding the Consular Reports are given in No. 131, page 663.

VALUES OF FOREIGN COINS AND CURRENCIES.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

These estimates "are to be taken (by customs officers) in computing the value of all foreign merchandise made out in any of said currencies, imported into the United States."

The following statements, running from January 1, 1874, to October 1, 1898, have been prepared to assist in computing the values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account that the ruble of Russia, for instance, has fluctuated from 77.17 cents in 1874 to 37.4 cents in April, 1897, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, and 1882 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz, (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—*Countries with fixed currencies.*

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange."

Countries.	Standard.	Monetary unit.	Value in U.S. gold.	Coins.
Argentine Republic*.	Gold and silver..	Peso	$0.96,5	Gold—Argentine ($4.82,4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†....	Gold	Crown	.20,3	Gold—20 crowns ($4.05,2) and 10 crowns.
Belgium	Gold and silver..	Franc	.19,3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil	Gold	Milreis	.54,6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland).	....do	Dollar	1.00	
British Honduras	....do	....do	1.00	
Chile	....do	Peso	.36,5	Gold—escudo ($1.25), doubloon ($3.65), and condor ($7.30); silver—peso and divisions.
Costa Rica	....do	Colon	.46,5	Gold—2, 5, 10, and 20 colons; silver—5, 10, 25, and 50 centisimos.
Cuba	Gold and silver..	....do	.92,6	Gold—doubloon ($5.01,7); silver—peso.
Denmark	Gold	Crown	.26,8	Gold—10 and 20 crowns.
Egypt	....do	Pound (100 piasters).	4.94,3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland	....do	Mark	.19,3	Gold—10 and 20 marks ($1.93 and $3.85,9).
France	Gold and silver..	Franc	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany	Gold	Mark	.23,8	Gold—5, 10, and 20 marks.
Great Britain	....do	Pound sterling...	4.86,6½	Gold—sovereign (pound sterling) and half sovereign.
Greece	Gold and silver..	Drachma	.19,3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti	....do	Gourde	.96,5	Silver—gourde.
Italy	....do	Lira	.19,3	Gold—5, 10, 20, 50, and 100 lire silver—5 lire.
Japan‡	Gold	Yen	.49,8	Gold—1, 2, 5, 10, and 20 yen.
Liberia	....do	Dollar	1.00	
Netherlands§	Gold and silver..	Florin	.40,2	Gold—10 florins; silver—½, 1, and 2½ florins.
Newfoundland	Gold	Dollar	1.01,4	Gold—$2 ($2.02,7).
Portugal	....do	Milreis	1.08	Gold—1, 2, 5, and 10 milreis.
Russia‖	....do	Ruble	.51,5	Gold—imperial ($7.718) and ½ imperial ($3.80); silver—¼, ½, and 1 ruble.
Spain	Gold and silver..	Peseta	.19,3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway.	Gold	Crown	.26,8	Gold—10 and 20 crowns.
Switzerland	Gold and silver..	Franc	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey	Gold	Piaster	.04,4	Gold—25, 50, 100, 200, and 500 piasters.
Venezuela	Gold and silver..	Bolivar	.19,3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

* In 1874 and 1875, the gold standard prevailed in the Argentine Republic.

† On reference to the table of "fluctuating currencies," it will be seen that Austria had the silver standard up to and including the quarter ended July 1, 1892. The next quarter (October 1) inaugurated the gold standard (see note under table of "fluctuating currencies").

‡ For particulars as to the change from silver to the gold standard, see CONSULAR REPORTS No. 201, p. 259.

§ The Netherlands florin, as will be seen in the "fluctuating" table, became fixed in value (40.2 cents) in 1880.

‖ For an account of the adoption of the gold standard, see Review of the World's Commerce, 1896-97, p. 254.

B.—*Countries with fluctuating currencies, 1874–1890.*

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver	Florin	$0.47,6	$0.45,3	$0.45,3	$0.41,3	$0.40,1	$0.39,8
Bolivia	do	Dollar until 1890; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America	do	Peso	.96,5	.91,8	.91,8	.83,6	.....	.....
China	Silver	Haikwan tael	1.61	1.61	.....	.....	.....	.....
Colombia	do	Peso	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador	do	do	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†	Gold	Pound (100 piasters).	.....	.....	4.97,4	4.97,4	4.90	4.90
India	Silver	Rupee	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan	Gold	Yen	.99,7	.99,7	.99,7	.99,7	.....	.....
	Silver		.....	.....	.....	.....	.87,6	.86,9
Mexico	do	Dollar	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands‡	Gold and Silver.	Florin	.40,5	.38,5	.38,5	.40,2	.....	.....
Peru	Silver	Sol	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia	do	Ruble	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli	do	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on Janury 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver	Florin	$0.39,3	$0.37,1	$0.35,9	$0.34,5	$0.33,6	$0.42
Bolivia	do	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America	do	Peso	.....	.....	.....	.69,9	.68	.85
Colombia	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†	Gold	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.94,3
India	Silver	Rupee	.37,8	.35,7	.34,6	.32,2	.32,3	.40,4
Japan	Gold	Yen	.....	.....	.99,7	.99,7	.99,7	.99,7
	Silver		.85,8	.81	.78,4	.75,3	.73,4	.91,7
Mexico	do	Dollar	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru	Silver	Sol	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia	do	Ruble	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli	do	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

* The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (see CONSULAR REPORTS, No. 147, p. 623) established the gold standard.

† The Egyptian pound became fixed in value at $4.94,3 in 1887.

‡ The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—*Quarterly valuations of fluctuating currencies.*

Countries.	Monetary unit.	1895.				1896.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.45,5	$0.44,1	$0.48,6	$0.48,6	$0.49,1	$0.49,3	$0.49,7	$0.49
Central America.	Silver peso	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
China	Amoy tael								.79·3
	Canton tael								.79
	Chefoo tael	.70,4	.68,3	.75,1	.75,2	.75,9	.76,3	.76,9	.75,8
	Chinkiang tael								.77,4
	Fuchau tael								.73,3
	Haikwan tael	.74,9	.75,6	.80	.80	.80,8	.81,2	.81 9	.80,6
	Hankau tael								.74·2
	Ningpo tael								.76.2
	Niuchwang tael								.74,3
	Shanghai tael	.67,3	.65,2	.71,8	.71,8	.72,5	.72,9	.73,5	.72,4
	Swatow tael								.73,2
	Takao tael								.79,8
	Tientsin tael	.71,4	.69,2	.76,1	.76,2	.76,9	.77,3	.78	.76,8
Colombia	Silver peso	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	49
Ecuador	do.	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	49,7	.49
India	Silver rupee	.21,6	.21	.23,1	.23,1	.23,3	.23,4	.23,6	.23,3
Japan	Silver yen	.49,1	.47,6	.52,4	.52,4	.52,9	.53,2	.53,2	.52,8
Mexico	Silver dollar	.49,5	.47,9	.52,8	.52,8	.53,3	.53,6	.54	53,2
Persia	Silver kran			.08,9	.09	.09	.09,1	.09,2	.09
Peru	Silver sol	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
Russia	Silver ruble	.36,4	.35,3	.38,9	.38,9	.39,3	.39,5	.39,8	39,2
Tripoli	Silver mahbub	.41,1	.39,8	.43,8	.43,8	.44,3	.44,5	.44,9	.44,2

Countries.	Monetary unit.	1897.				1898.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.47,4	$0.46,8	$0.44,3	$0.41,2	$0.42,4	$0.40,9	$0.41,8	$0.43,6
Central America.	Silver peso	.47,4	.46,5	.44,3	.41,2	.41,4	.40,9	.41,8	.43,6
China	Amoy tael	.76,7	.75,7	.71,7	.66,4	.68,5	.66,2	.67,6	.70,6
	Canton tael	.76,5	.75,5	.71,5	.66,4	.68,3	.66	.67,4	.70,4
	Chefoo tael	.73,3	.72,4	.68,6	.63,7	.65,5	.63,3	.64,6	.67,5
	Chinkiang tael	.74,9	.73,9	.70	.65,1	.66,9	.64,6	.66	.69
	Fuchau tael	.70,9	.70	.66,3	.61,6	.63,4	.61,2	.62,5	.65,3
	Haikwan tael	.78	.77	.73,1	.67,8	.69,7	.67,3	.68,8	71,8
	Hankau tael	.71,7	.70,8	.67,1	.62,3	.64,1	.61,9	.63,2	.66
	Ningpo tael	.73,7	.72,8	.68,9	.64	.64,3	.63,6	.65	.67,9
	Niuchwang tael	.71,9	.71	.67,2	.62,5	.65,9	.62	.63,4	.66,2
	Shanghai tael	.70	.69,1	.65,5	.60,8	.62,6	.60,4	.61,7	.64,5
	Swatow tael	.70,8	.69,9	.66,2	.61,5	.63,3	.61,1	.62,4	.65,2
	Takao tael	.77,2	.76,2	.72,2	.67	.66	.66,6	.68	.71
	Tientsin tael	.74,3	.73,4	.69,5	.64,6	.66,4	.64,1	.65,5	.68,4
Colombia	Silver peso	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9	.41,8	.43,6
Ecuador	do.	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9	.41,8	.43,6
India*	Silver rupee	.22,5	.22,2	.21,1	.19,6	.20,1	.19,1	.19,9	.20,7
Japan	Silver yen	.51,1	.50,5						
Mexico	Silver dollar	.51,5	.50,8	.48,2	.44,6	.46	.44,4	.45,4	.47,4
Persia	Silver kran	.08,7	.08,6	.08,2	.07,6	.07,8	.07,5	.07,7	.08
Peru	Silver sol	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9	.41,8	.43,6
Russia	Silver ruble	.37,9	.37,4						

*The value of the rupee to be determined by consular certificate.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalents.
Almude	Portugal	4.422 gallons.
Ardeb	Egypt	7.6907 bushels.
Are	Metric	0.02471 acre.
Arobe	Paraguay	25 pounds.
Arratel or libra	Portugal	1.011 pounds.
Arroba (dry)	Argentine Republic	25.3175 pounds.
Do	Brazil	32.38 pounds.
Do	Cuba	25.3664 pounds.
Do	Portugal	32.38 pounds.
Do	Spain	25.36 pounds.
Do	Venezuela	25.4024 pounds.
Arroba (liquid)	Cuba, Spain, and Venezuela	4.263 gallons.
Arshine	Russia	28 inches.
Arshine (square)	do	5.44 square feet.
Artel	Morocco	1.12 pounds.
Baril	Argentine Republic and Mexico	20.0787 gallons.
Barrel	Malta (customs)	11.4 gallons.
Do	Spain (raisins)	100 pounds.
Berkovets	Russia	361.12 pounds.
Bongkal	India	832 grains.
Bouw	Sumatra	7,096.5 square meters.
Bu	Japan	0.1 inch.
Butt (wine)	Spain	140 gallons.
Caffiso	Malta	5.4 gallons.
Candy	India (Bombay)	529 pounds.
Do	India (Madras)	500 pounds.
Cantar	Morocco	113 pounds.
Do	Syria (Damascus)	575 pounds.
Do	Turkey	124.7036 pounds.
Cantaro (cantar)	Malta	175 pounds.
Carga	Mexico and Salvador	300 pounds.
Catty	China	1.333⅓ (1⅓) pounds.
Do*	Japan	1.31 pounds.
Do	Java, Siam, and Malacca	1.35 pounds.
Do	Sumatra	2.12 pounds.
Centaro	Central America	4.2631 gallons.
Centner	Bremen and Brunswick	117.5 pounds.
Do	Darmstadt	110.24 pounds.
Do	Denmark and Norway	110.11 pounds.
Do	Nuremberg	112.43 pounds.
Do	Prussia	113.44 pounds.
Do	Sweden	93.7 pounds.
Do	Vienna	123.5 pounds.
Do	Zollverein	110.24 pounds.
Do	Double or metric	220.46 pounds.
Chih	China	14 inches.

*More frequently called "kin." Among merchants in the treaty ports it equals 1.33⅓ pounds avoirdupois.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Coyan	Sarawak	3,098 pounds.
Do	Siam (Koyan)	2,667 pounds.
Cuadra	Argentine Republic	4.2 acres.
Do	Paraguay	78.9 yards.
Do	Paraguay (square)	8.077 square feet.
Do	Uruguay	Nearly 2 acres.
Cubic meter	Metric	35.3 cubic feet.
Cwt. (hundredweight)	British	112 pounds.
Dessiatine	Russia	2.6997 acres.
Do	Spain	1.599 bushels.
Drachme	Greece	Half ounce.
Egyptian weights and measures	(*See* CONSULAR REPORTS No. 144.)	
Fanega (dry)	Central America	1.5745 bushels.
Do	Chile	2.575 bushels.
Do	Cuba	1.599 bushels.
Do	Mexico	1.54728 bushels.
Do	Morocco	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do	Uruguay (double)	7.776 bushels.
Do	Uruguay (single)	3.888 bushels.
Do	Venezuela	1.599 bushels.
Fanega (liquid)	Spain	16 gallons.
Feddan	Egypt	1.03 acres.
Frail (raisins)	Spain	50 pounds.
Frasco	Argentine Republic	2.5096 quarts.
Do	Mexico	2.5 quarts.
Fuder	Luxemburg	264.17 gallons.
Garnice	Russian Poland	0.88 gallon.
Gram	Metric	15.432 grains.
Hectare	do	2.471 acres.
Hectoliter:		
Dry	do	2.838 bushels.
Liquid	do	26.417 gallons.
Joch	Austria-Hungary	1.422 acres.
Ken	Japan	6 feet.
Kilogram (kilo)	Metric	2.2046 pounds.
Kilometer	do	0.621376 mile.
Klafter	Russia	216 cubic feet.
Koku	Japan	4.9629 bushels.
Korree	Russia	3.5 bushels.
Last	Belgium and Holland	85.134 bushels.
Do	England (dry malt)	82.52 bushels.
Do	Germany	2 metric tons (4,480 pounds).
Do	Prussia	112.29 bushels.
Do	Russian Poland	113⅜ bushels.
Do	Spain (salt)	4,760 pounds.
League (land)	Paraguay	4,633 acres.
Li	China	2,115 feet.
Libra (pound)	Castilian	7,100 grains (troy).
Do	Argentine Republic	1.0127 pounds.
Do	Central America	1.043 pounds.
Do	Chile	1.014 pounds.
Do	Cuba	1.0161 pounds.
Do	Mexico	1.01465 pounds.
Do	Peru	1.0143 pounds.
Do	Portugal	1.011 pounds.
Do	Uruguay	1.0143 pounds.
Do	Venezuela	1.0161 pounds.
Liter	Metric	1.0567 quarts.
Livre (pound)	Greece	1.1 pounds.
Do	Guiana	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Load	England (timber)	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 superficial feet.
Manzana	Costa Rica	1⅞ acres.
Do	Nicaragua and Salvador	1.727 acres.
Marc	Bolivia	0.507 pound.
Maund	India	82⅔ pounds.
Meter	Metric	39.37 inches.
Mil	Denmark	4.68 miles.
Do	Denmark (geographical)	4.61 miles.
Milla	Nicaragua and Honduras	1.1493 miles.
Morgen	Prussia	0.63 acre.
Oke	Egypt	2.7225 pounds.
Do	Greece	2.84 pounds.
Do	Hungary	3.0817 pounds.
Do	Turkey	2.85418 pounds.
Do	Hungary and Wallachia	2.5 pints.
Pic	Egypt	21¼ inches.
Picul	Borneo and Celebes	135.64 pounds.
Do	China, Japan, and Sumatra	133⅓ pounds.
Do	Java	135.1 pounds.
Do	Philippine Islands (hemp)	139.45 pounds.
Do	Philippine Islands (sugar)	140 pounds.
Pie	Argentine Republic	0.9478 foot.
Do	Castile	0.91407 foot.
Pik	Turkey	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound)	Denmark and Sweden	1.102 pounds.
Quarter	Great Britain	8.252 bushels.
Do	London (coal)	36 bushels.
Quintal	Argentine Republic	101.42 pounds.
Do	Brazil	130.06 pounds.
Do	Castile, Chile, Mexico, and Peru	101.61 pounds.
Do	Greece	123.2 pounds.
Do	Newfoundland (fish)	112 pounds.
Do	Paraguay	100 pounds.
Do	Syria	125 pounds.
Do	Metric	220.46 pounds.
Rottle	Palestine	6 pounds.
Do	Syria	5¾ pounds.
Sagen	Russia	7 feet.
Salm	Malta	490 pounds.
Se	Japan	0.02451 acres.
Seer	India	1 pound 13 ounces.
Shaku	Japan	11.9305 inches.
Sho	do	1.6 quarts.
Standard (St. Petersburg)	Lumber measure	165 cubic feet.
Stone	British	14 pounds.
Suerte	Uruguay	2,700 cuadras (see cuadra).
Sun	Japan	1.193 inches.
Tael	Cochin China	590.75 grains (troy).
Tan	Japan	0.25 acre.
To	do	2 pecks.
Ton	Space measure	40 cubic feet.
Tonde (cereals)	Denmark	3.94783 bushels.
Tondeland	do	1.36 acres.
Tsubo	Japan	6 feet square.
Tsun	China	1.41 inches.
Tunna	Sweden	4.5 bushels.
Tunnland	do	1.22 acres.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Vara	Argentine Republic	34.1208 inches.
Do	Castile	0.914117 yard.
Do	Central America	32.87 inches.
Do	Chile and Peru	33.367 inches.
Do	Cuba	33.384 inches.
Do	Curaçao	33.375 inches.
Do	Mexico	33 inches.
Do	Paraguay	34 inches.
Do	Venezuela	33.384 inches.
Vedro	Russia	2.707 gallons.
Vergees	Isle of Jersey	71.1 square rods.
Verst	Russia	0.663 mile.
Vlocka	Russian Poland	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram ($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6418 gallons.
Hectoliter (100 liters) equals 26.418 gallons.
Kiloliter (1,000 liters) equals 264.18 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.

Decameter (10 meters) equals 393.7 inches.
Hectometer (100 meters) equals 328 feet 1 inch.
Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).
Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.
Are (100 square meters) equals 119.6 square yards.
Hectare (10,000 square meters) equals 2.471 acres.

CONSULAR REPORTS.

COMMERCE, MANUFACTURES, ETC.

Vol. LVIII. NOVEMBER, 1898. No. 218.

FINANCIAL CONDITIONS IN CHILE.*

On July 8, I telegraphed the Department:

Severe financial crisis precipitated by run on Bank of Chile. All banks in Chile closed by consent of Government. Business practically suspended pending arrangements.

For a period of about thirty days prior to the date of my telegram, there had been a gradual tightening in the money market and visible perturbation in financial circles. Discounts were heavily reduced and exchange fell—not violently, but steadily—from 17⅝d. to 17d.

On June 18, 1898, Señor Darío Zañartu, the Minister of Finance, resigned his portfolio, and his post was promptly filled by the appointment of Señor Sotomayor. The circumstances under which this change in the ministry was made called out an animated discussion in the press relative to the condition of Chilean finances. The public excitement was further accentuated by various charges and admissions made in the House of Deputies, and a quiet but steady withdrawal of deposits from the Bank of Chile was begun by its depositors. A few days after, the Minister of War, Señor Ventura Blanco, amplifying a statement of the Minister of Finance, stated in Congress that unless the Bank of Chile received the proceeds of the loan of £500,000, recently made by the Bank of Tarapacá and

* For history of financial changes in Chile, see report of Minister E. H. Strobel, published in pamphlet form by the Treasury Department in 1896 and reprinted in part, with additional matter, in Special Consular Reports Money and Prices.

London to the Government of Chile, it would have to close. The Minister of Finance, at a later date, in making statements relative to the conditions of the Bank of Chile, took occasion to enlarge upon the necessity and great benefits of an issue of paper money by the Government. It is also said that, in secret session, it was revealed that the Government, instead of having on hand, as was stated at the opening of Congress, a surplus of 13,000,000 pesos, had in reality, taking into account all resources, a balance of only 30,000 pesos.

These grave disclosures, taken together with the apparent favorable attitude of the Government toward an issue of paper money, brought on a widespread panic, resulting in a run on the banks, which practically exhausted their reserves. It was evident that unless some prompt and radical step was taken by the Government, not only the Bank of Chile, but all the banking institutions in the country, except the foreign banks, would be involved in hopeless and irretrievable ruin.

Accordingly, after some hesitation, due primarily, I think, to doubt as to the legality of the act, the Government, upon July 6, 1898, issued to all banks doing business in the country permission to temporarily close their doors. Following immediately, at an interval of only five days, Congress passed an act, called the "Moratoria," or "license to debtors" (translation of which is inclosed), the effect of which was the suspension of all payments, or actions at law for debts, for thirty days, without prejudice to the debtor. After the passage of this act, the banks opened their doors, but paid to depositors such sums only as would relieve their actual and present necessities, exercising full discretion as to the amount in each case. The immediate effect of this unprecedented policy was the closing of all factories and establishments with large pay rolls, and thousands of workingmen were thrown out of employment.

Upon July 13, 1898, the President sent to Congress a message (translation of which is inclosed), in which he stated that "on account of the hoarding of the metallic currency for causes which could not by any means be considered permanent, it was indispensable to adopt measures of a transitory nature, which would permit of business being carried on as usual, and prepare for the permanent maintenance of the metallic currency." To meet this situation, the President then proceeded to recommend the emission of 50,000,000 pesos of paper money, which by law must be taken for the settlement of all obligations which may not have been specially contracted in gold. Recommendation was also made that the present issue of the banks be made a part of the 50,000,000 pesos issue, the entire sum to be retired within the term of four years from the date of the act. Other recommendations of a vital character were made; but

as the bill, as adopted by Congress, is in many respects different from that recommended by the President, comment upon his recommendations, except in a general way, is superfluous.

Immediately upon the receipt of the President's message, Congress began the consideration of the measure; but, as the variety of individual views was limited only by the number of members of the body, very slow progress was made, and the existing distress in all circles became greatly intensified from day to day. Among the small tradesmen, artisans, and people of the working classes generally, who appear to universally favor the gold standard and oppose with extreme bitterness an issue of paper money by the Government, feeling ran very high, and, in several instances, has found expression in tumultuous and threatening gatherings. Upon July 20, 1898, these elements of the population, to a number which I have heard estimated as high as six thousand, assembled and marched to the "Moneda" (the Government palace) and presented a petition of grievances and demands (translation of which I inclose) to the President. The President replied that he regretted the situation, and fully sympathized with their condition; but that the responsibility had passed from him to Congress, which body it seemed to him was devoting entirely too much time to the measures intended for the prompt relief of the people. Acting upon this suggestion, the immense throng marched to the House of Deputies, where Congress was in session, and through a committee demanded the immediate enactment of the legislation necessary to relieve the situation. The House of Deputies was fully surrounded by mounted police, and before the crowd was dispersed a number of sharp encounters occurred. The assemblage, however, was finally dispersed, although the severe methods by which it was accomplished have called forth some criticisms from the radical press.

Upon July 22, 1898, the House of Deputies passed a bill for the emission of 50,000,000 paper pesos of 18d. (36.5 cents), but made many important departures from the recommendations contained in the President's message. The bill then passed to the Senate, where many of the provisions of the House of Deputies were stricken out or amended, and was returned to the House and finally adopted as inclosed, July 30, 1898.

It is a fact worthy of note that in the votes taken upon this measure, the radicals and representatives of the working classes in Congress were in solid and uncompromising opposition. The leaders of this element declared in debate that the interests of the poor but solvent working classes and small tradesmen were vitally concerned in the maintenance of the gold standard, and that the proposed emission of paper money, while destined to work general harm, would

fall with especial severity upon the class of people represented by them in Congress.

The landholders, who constitute a majority of the representatives in Congress, were almost without exception in favor of the law which has been enacted. By far the greater part of this element hold heavily mortgaged estates, and it was probably not an uncongenial task for them to give their support to a measure the direct effect of which will be to reduce their liabilities.

Whatever may have been the causes impelling support of, or opposition to, the law, the fact remains that Chile has now entered upon a new chapter in her somewhat eventful financial history, and the causes and immediate effects of the legislation which has been enacted may not be without useful instruction.

When, in 1895, the Government of Chile passed the resumption act, which has been in force until the present time, the currency of the country consisted of about 20,000,000 pesos in bank notes, 18,000,000 pesos in Government fiduciary paper, and about 5,000,000 pesos in subsidiary silver. To retire the issue of the Government notes, it was provided that by June 11, 1895, the Government would redeem them in gold coin upon presentation. With reference to the issue of the banks, substantially the same policy was adopted. The Government guaranteed their payment until December 31, 1897, and redeemed them in like manner with its own paper, taking over notes for the entire amount of the issue, with local guaranties as its security. The banks were given the right to redeem their obligations, given to the Government, in monthly gold payments. If the bank bills were not redeemed within the period fixed, they were to be incinerated, and thereafter a fixed rate of interest was to be charged against the original obligation of the defaulting bank. To secure the gold necessary to render this plan of resumption a success, two courses were adopted:

First. The sale of the proceeds of the nitrate deposits were by law set aside for that purpose.

Second. A loan of £2,000,000 was negotiated abroad.

It would seem that with the flexible character and ample guaranties of the law of 1895, its success would have been assured. That it has not met the anticipations of its framers is not due to any inherent weakness of the law itself, or to a false estimate of the resources necessary to bring it to a successful issue. Its first effect was to raise the value of the Chilean peso, which, for some years prior, had been fluctuating between 11½d. and 15d. to 17½d., and ultimately to 17⅝d., at which point it has remained with unimportant exceptions until the enactment of the present law. Importers, merchants, and bankers have thus been able to make their calcula-

tions and estimates with reasonable accuracy. Credits have been easy and extensive, because of the faith that all current obligations would be met with dollars of equal value. Prices have been cheap, because the merchant did not have to add to the value of his merchandise an estimate for the unknown depreciation of the money of liquidation. The law therefore has not failed to accomplish good results, and to measurably improve the condition of the commercial and industrial classes. Judged bv these standards, it was a gratifying success.

The causes of its failure lie upon the surface, and are easy of comprehension. They are:

First. The incomplete manner in which the law was carried out.

Second. The abnormal expenditures of the Government for war purposes.

The indulgent attitude observed towards the banks in failing to require them to make good their issues in gold within a reasonable time has not only deprived the Government of the gold supplies which, under the theory of the law, the banks should have furnished, but has rendered possible a fictitious rather than a real return to gold payments. When the resumption act went into effect, there can be no question but that the banks had not made proper preparation to redeem their notes in gold, even in the time granted them by the Government. Consequently, when the Government sought to compel rigid compliance with the law, it was met with the statement that such a course would ruin the banks and involve the commerce of the country in hopeless confusion. Impressed by these views, the Government granted one delay after another to the banking interests, and the bank issues, instead of being incinerated when exchanged for gold, were again put in circulation; and, by the process of those natural financial laws which we have seen exemplified in our own monetary history, an "endless chain" was created which constantly depleted the Government reserves. It is stated that it was not an unusual practice for banks, after making their payments of monthly installments of gold, as required by law, and receiving therefor their own notes, to immediately, and as a part of the same transaction, exchange these same notes for gold. Naturally, transactions of this character were beneficial to the banks, but a serious detriment to the Government in the consummation of its financial policy.

The lax method in which the law was administered carried its demoralizing influence into all the business transactions of the country. Operations were all on a fictitious basis, everything being done by check, the principal business of the country being transacted through the Bank of Chile, which was not in a sound cash position.

It was not an infrequent thing between banks to discharge balances, payable in gold to the extent of millions, with a small percentage in gold and the remainder in checks and bank notes. It will thus be seen that while specie payments nominally prevailed, and gold was the basis of settlement, in reality gold settlements were only for limited amounts, and gold never became the money of final redemption.

Of equal gravity with the lax administration, in its effects upon the success of the resumption act, have been the extraordinary war expenditures made by the Government during the last three years, in consequence of the difficulties with the Argentine Republic over the boundary question. Although both Governments are, by the terms of the treaties, bound to submit all differences to the final arbitrator (the Government of Great Britain), both have nevertheless made every preparation to resolve their difficulties by the arbitrament of the sword. The anticipation of an armed conflict has led the Government to make preparation upon a scale entirely out of proportion to the wealth, population, and resources of the country. Although Chile ranks about twenty-third among the civilized nations of the world, she has advanced her navy to the eighth place, and to the second among nations of this hemisphere. Her army has been kept upon an equally formidable footing, and to-day it is second to none in America, except that of the United States. All ships and naval stores, ammunition, guns, and uniforms are purchased abroad, and, as the payments are universally in gold, the effect has not only been disastrous to the general prosperity of the country, but has weighed as an especial burden upon the declared financial policy of the Government. I am informed by the Chilean Foreign Office that the extraordinary war expenditures, since June, 1895, will amount to about 53,000,000 pesos of 18d., or about $19,500,000 United States gold. The Government therefore has expended in gold for extraordinary war purposes about twice as much as the loan authorized by Congress to aid in the resumption of specie payment; and for every gold dollar brought into the country under the loan, two have been sent out in the purchase of war material. If other reasons were lacking, this alone would be sufficient explanation for the failure of the Government to carry to a successful issue a financial policy conceived in perfect good faith and sound wisdom and which, while in force, brought unmeasured benefits to the commercial and industrial classes of Chile.

A full and accurate forecast of the effects of the present law can hardly be made so soon after its enactment; but there have been some immediate results, the recital of which may not be devoid of interest.

Since the enactment of the law of 1895, the Chilean Government has coined 67,000,000 gold pesos. Of this sum it is estimated, by banking authorities, that 45,000,000 pesos were in circulation in the country June 1, 1898. Immediately upon the passage of the present law, or rather a few days before, in anticipation of its passage, this 45,000,000 gold pesos disappeared absolutely from circulation, and to-day there is not a single gold peso circulating as money in Chile. It has ceased to be money, and has become a mere commodity, its value subject to the laws of supply and demand, just as any other commodity. Since the date of its disappearance as money, July 30, 1898, it has advanced by rapid stages from 6 per cent premium to 12, 15, 18, 24, 28, 30, 36, and 40 per cent, being sold upon the bourse, by money changers and speculators, to those whose business necessities demanded its possession. As the value of gold has advanced, the value of the new paper issue has fallen in corresponding ratio, and, within one month of the passage of the law authorizing the emission, the country finds that every Chilean paper peso has depreciated something like 30 per cent from its face value, and that the entire issue has lost almost one-third of its purchasing power. It is apparent, therefore, that Chile, instead of increasing her circulating medium, has driven from circulation 45,000,000 gold pesos and substituted therefor paper currency having a nominal value of 50,000,000 pesos, but an actual value of 35,000,000 pesos. To meet this depreciation, the Government will, in all probability, be forced, in the near future, to authorize additional issues of paper money, to be followed by others as the stress of the situation becomes more severe. It does not therefore require great penetration to prophesy that the ultimate result must be either enormous loss to the country or repudiation. Either of these results will be fraught with grave peril to a country possessing so few developed resources and such a limited amount of capital.

Although, in my judgment, the ultimate effect of the present law will be injurious to all classes, its immediate effects have not been without apparent compensating advantages to certain interests.

The Government, under a great strain to maintain its military establishment, finds its coffers replenished temporarily with ample funds to meet its pressing obligations of a domestic character. Troops, seamen, and provisions can all be paid for in paper money at face value; and as, at this time, these items constitute the main charges against the Government, its temporary difficulties have been lessened.

The wealthy proprietors, holding in most cases heavily mortgaged estates, by the operation of this law find themselves in the agreeable situation of being able to discharge their debts with money

equal to only two-thirds of its face value. Their satisfaction in this prospect, however, is not unmixed with some doubts as to the effect the law will have upon the value of farm products, and as to their ability, under the existing circumstances, to obtain the necessary money to discharge their debts even at two-thirds their real value. It may be anticipated that as time passes their satisfaction will be continually less and their doubts greater.

The banks, having a closer insight into the situation, and foreseeing the emission of paper money, were able to anticipate and largely discount its effects. Discounts had been steadily reduced prior to the enactment of the law; but, as deposits remained practically the same, the operation of the law has had the effect of benefiting the banks to the extent of the depreciation of the excess of their deposits over their loans. A bank, therefore, with 1,000,000 pesos deposits and 700,000 pesos in loans would make a net profit of 30 per cent on 300,000 pesos. In the unsettling of all values, the loss in capitalization, and the general distrust engendered, the banks, however, will find it difficult to do a safe and remunerative business. Their brief hour of profit will probably be followed by conditions rendering legitimate banking impossible.

The importing and large trading houses, whose obligations in a great measure are payable in gold, will suffer an immediate loss in their accounts current, which, of course, are payable in depreciated currency. To meet existing conditions, however, and prevent future losses, these interests have entered into an agreement that all future sales shall be made from two scales of prices—one based upon gold, and the other upon the estimated value of the paper peso. Of course, no gold is paid, and the settlement is, therefore, made upon the basis of the relative value of the paper money to the gold.

The following table will serve to indicate the relative difference in gold and paper prices upon some important staples handled by importing houses:

Articles.		Price.*	
		Gold.	Paper.
Cotton goods	per yard	$0.66	$1.00
Woolen goods	do	.92	1.25
Coffee	per pound	.47	.63
Tea	do	.80	1.07
Sugar	do	.08	.12

*The prices given are the equivalents in United States gold of the prices in Chilean currency.

The same ratio of increase noted here applies to all articles brought in from abroad, and as Chile is not a manufacturing coun-

try and the scope of production is limited, it will be seen that the change is sweeping and radical.

To this point, the interests which have been considered have been those which either derive some benefit from a depreciation in the currency, or are able to adjust themselves in some measure to the shifting conditions. But when the effect of the law upon petty tradesmen and wage earners is considered, a much more serious problem is presented. Upon these classes the new law falls with especial severity. The petty tradesman, handling only native products and dealing only in limited transactions with people of limited means, is obliged to sell his wares at the prices ruling before the paper-money issue. Local customs and peculiar trade methods make it impossible for him to adjust himself to the changed conditions. As his daily transactions are small and infinitely detailed, he becomes sensible of loss only with the lapse of time, and then, in all probability, can not locate the cause. Even more serious is the effect of the law upon wage earners. This class of citizens, upon whose prosperity one would suppose the prosperity of the country was vitally dependent, feels to the greatest extent the evil effects of the depreciated currency. They accept all changes, for better or for worse, with a degree of philosophy incomprehensible to those accustomed to the quick intelligence and ready self-assertion of the laboring classes of other countries. All the laboring classes of Chile, without exception, are now paid in paper money at its face value; and yet the purchasing value of the money has depreciated 30 per cent.

Therefore, while receiving nominally the same wages as heretofore, the Chilean laborer or mechanic is really receiving 30 per cent less. This is best shown by the following table, showing the wages in actual purchasing power paid June 1, 1898, and August 1, 1898:

Class of labor.	Amount paid.*	
	June 1, 1898.	Aug. 1, 1898.
Ordinary laborers	$0.50	$0.34
Masons	.67	.47
Carpenters	1.33	.93
Gasfitters	1.33	.93
Painters	1.00	.70

*Stated in United States gold.

We here have the evidence of recent history in proof of the often repeated, but as often challenged, statement that the evils of a fluctuating and unstable currency affect more quickly and more griev-

ously the interests of the wage earner than the interests of any other class.

I have thus briefly endeavored to show the causes leading to the failure of the resumption act of 1895, and some of the immediate effects of the law of 1898. I have not aimed to furnish the Department with an ambitious financial treatise, but merely to recite, without unnecessary comment, the plain history of the situation, hoping that the lessons arising therefrom may not be without instructive value.

HENRY L. WILSON,
Minister.

SANTIAGO, *August 19, 1898.*

LICENSE TO DEBTORS ACT.

Law No. 1051. Congress having approved the following bill:

SOLE ARTICLE. For the term of thirty days there may neither be begun nor continued any lawsuit for the recovery of money, whether civil or commercial, including bankruptcy cases, arising out of obligations contracted before the promulgation of the present law.

Obligations arising from Government or municipal taxes are excepted from the foregoing.

With regard to the obligations which fall due within the term of this license to debtors, the license shall be calculated from the date such obligation falls due.

This act shall rule from the date of its publication in the Diario Oficial.

And, having consulted with the Council of State, I have decided to approve and sanction it; let it be promulgated and carried out as law of the Republic.

SANTIAGO, *June 11, 1898.*

FEDERICO ERRAZURIZ.

R. SOTOMAYOR.

PRESIDENT'S MESSAGE TO CONGRESS.

FELLOW CITIZENS OF THE HOUSE OF DEPUTIES: The grave difficulties which have arisen on account of the hoarding of the metallic currency, for causes which can not by any means be considered permanent, have rendered it indispensable to adopt measures of a transitory nature which will allow of business being carried on as usual, and which will prepare for the permanent maintenance of the metallic currency.

With these objects in view, I have the honor, after consultation with the Council of State, to submit to you the following bill:

ARTICLE 1. The President of the Republic is authorized, for the term of one year, to issue up to 50,000,000 pesos of paper money of compulsory acceptance, which shall serve for the settlement of all obligations the payment of which may not have been specially contracted in gold money, in accordance with the act of September 10, 1892.

Export and import duties and custom-house storage shall continue to be paid in gold money or in drafts on London, in accordance with article 11 of act No. 980, of December 23, 1897.

During the months of July, August, September, and October of the present year, export duties may be paid wholly in drafts on London.

ART. 2. The President of the Republic is authorized, for the term of one year, to lend to the banks, with sufficient guaranties, up to 20,000,000 pesos, with interest at 4 per cent per annum, and for the periods of time he may fix.

ART. 3. The bank issue which exists at present is declared to be a Government issue, and shall be included in the 50,000,000 pesos authorized by article 1.

The banks of issue shall pay to the Government this emission in three installments, and in proportion as they make the payment they shall have returned to them the guaranties which they have given, and which shall continue to be liable for the Government credit.

The bank may not issue notes as long as the Government notes are of compulsory acceptance.

ART. 4. The part of the issue which may not have been loaned to the banks shall be employed by the President of the Republic in the purchase, at par value, of hypothecary bonds, payable in gold, earning 4 per cent interest, and with accumulative amortization at 2 per cent per annum, issued by the Caja de Crédito Hipotecario, or other similar institutions designated by the President of the Republic. The sums returned by the banks shall be invested in the same manner.

These bonds shall be deposited in the mint and be employed exclusively for the payment of the Government issue.

Every six months, the sums obtained for amortization and interest shall be invested in similar bonds, purchased by public tender.

If within the term of three months 10,000,000 pesos of hypothecary gold bonds are not offered for sale, 8 per cent hypothecary bonds shall be purchased by public tender.

ART. 5. The paper money shall be withdrawn from circulation within the term of four years, and the President of the Republic is authorized to contract loans for up to £4,000,000, destined exclusively to the withdrawal of the paper money.

ART. 6. As long as this act remains in force, the mint shall not exchange gold for silver money.

ART. 7. The President of the Republic is authorized to organize the office to be intrusted with the issue of the Government notes.

ART. 8. From November 1 of the present year, one-third of the salaries and other Government expenses shall be paid in metallic currency.

SANTIAGO, *July 13, 1898.*

F. ERRAZURIZ.

R. SOTOMAYOR.

PETITION TO THE PRESIDENT.

YOUR EXCELLENCY: In Santiago, Chile, on the 20th day of the month of July, 1898, we, the laborers of the capital, in public meeting assembled, resolve to put within the knowledge of the honorable House, through the medium of Your Excellency, the following petition:

The working class groans to-day in want, owing to the financial crisis through which the country is passing, to such an extent as to have absolutely no work, on account of manufacturers having closed their establishments.

We, seeing that the act of license to debtors has done us harm, appeal to Your Excellency to take the necessary measures tending to improve the situation.

Furthermore, we are laborers, and the time has arrived to speak frankly, in order to show that not even pawnshops can protect us.

If within this week some measure is not taken in our favor, we will have to say, to our shame, "We are hungry."

You see, Mr. President, the son of toil, the lion of the struggle, begs for protection from his rulers.

With this object, we offer herewith the following suggestions:

(1) Early solution of the financial crisis through which the country is passing.

(2) In case paper money reappears, that it should not exist for a long period, and should not be of a less legal value than 18d.

(3) Repeal of the act of license to debtors.

(4) That our legislators once and for all should abandon politics, and pay attention to the general welfare of the people.

(5) Heavy increase in the import duties on products of arts and industry which can be manufactured in the country, especially on articles of luxury, excepting the raw material which does not exist here.

These petitions should be solved in the present week, as by next week the whole working class will be without bread for their families.

NEW FINANCIAL MEASURE.

ARTICLE 1. The President of the Republic is authorized, for the term of one year, to issue up to 50,000,000 pesos in Government notes, of compulsory acceptance, payable in gold pesos of 18d., the bank issues being included in this sum.

These notes shall serve for the settlement of all obligations, with the following exceptions only:

First. Obligations expressly contracted or which may be contracted in national or foreign gold or silver money, in accordance with the act of September 10, 1892, may be exacted in the money agreed upon.

Second. Import duties and custom-house storage shall be paid in gold money of 18d. per peso, or in pounds sterling calculated at their legal value.

Third. Export duties shall be paid in gold money or in drafts on London, in accordance with article 11 of act No. 980, of December 23, 1897.

Nevertheless, until October 1 of the present year, export duties may be paid wholly in drafts on London.

ART. 2. The President of the Republic is authorized, for the term of one year, to deposit, subject to 2 per cent interest per annum and with sufficient guaranties, up to the total amount of the issue, in deposit or discount banks which subject themselves to the act of July 23, 1860.

The deposits shall be made in proportion to the paid-up capital of the banks, and on terms designated by the President of the Republic.

ART. 3. The bank issue at present existing is declared a Government issue.

The banks of issue shall pay this issue to the Government, in three installments, within the term of three years, and in proportion as they make the payment they shall have returned to them the guaranties which they have given, and which shall continue to be liable for the Government credit.

The banks may not issue notes as long as the Government notes are of compulsory acceptance.

ART. 4. There shall be taken annually out of the custom-house receipts, from June 1, 1899, in order to form the conversion fund, 10,000,000 pesos in gold (without prejudice to the sum which may be designated for this purpose in the appropriations for public expenditure), which shall be invested exclusively in first-class foreign bonds or values designated by the President of the Republic.

The Government shall draw monthly against the deposits made in the banks, in accordance with article 2, in proportion to the amount deposited in each bank, a sum equivalent to that referred to in the foregoing paragraph.

From January 1, 1902, the State shall pay the face value of the paper money in gold pesos of 18d. each.

The President of the Republic is authorized to sell the bonds referred to in the first paragraph of this article.

These funds may not be employed for any other purpose unless authorized by a special act of Congress.

ART. 5. That part of the issue which may not have been loaned to the banks may be employed by the President of the Republic in the purchase, by public tender, of bonds of the Caja de Crédito Hipotecario, payable in current money or gold pesos of 18d. per peso.

The sums obtained for amortization and interest may be invested in the same manner.

The bonds bought in accordance with the foregoing paragraphs shall be used exclusively for the payment of the Government issue.

ART. 6. As long as this act remains in force, the mint shall not exchange gold for silver money.

ART. 7. The President of the Republic shall fix the term within which bank notes shall be exchanged for Government notes in the office to be designated for that purpose.

On the expiration of that term, which shall not be less than six months, bank notes shall not be of compulsory acceptance.

ART. 8. Six months after beginning the payment of the Government notes in gold, the account of notes exchanged with each bank of issue shall be made out, and the State shall return the difference between the sum which such bank may have paid to the Government, in accordance with article 4, and the amount of the notes exchanged; the payment in gold of the notes not exchanged being for account of the bank.

ART. 9. Government notes authorized by previous acts of Congress shall be exchanged in Government treasury offices for those authorized by this act.

ART. 10. The President of the Republic is authorized for the term of two years to have coined up to 10,000,000 pesos in the silver coins provided for by act 277 of February 11, 1895, buying the bullion necessary for that purpose.

ART. 11. He is likewise authorized, for the term of one year, to have coined up to 500,000 pesos in token money of 1 cent and 2.5 cents.

ART. 12. The President of the Republic is authorized to expend up to the sum of 200,000 pesos in the expenses incurred in carrying out this act.

ART. 13. National and foreign banks are subject to the act of July 23, 1860, and others in connection therewith, even if they have not issued notes.

ART. 14. The banks shall enter, in a special account, the sums resulting from obligations of individuals or companies established abroad.

ART. 15. Banks that have registered notes subsequently to July 6, 1898, shall pay interest on the amount of such issues at the rate of 2 per cent per annum, from the date of the promulgation of this act to the date of the expiration of the terms stipulated in article 4.

For the effects of the deposits, the issues made by each bank in accordance with the foregoing paragraph shall be considered as an integral part of the sums corresponding to them, in the proportionate distribution referred to in article 2.

ART. 16. The notes, the issue of which is authorized by this act, may be of the value of 1, 2, 5, 10, 20, 50, 100, 500, and 1,000 pesos.

ART. 17. This act shall be in force from the date of its publication in the official journal (Diario Oficial).

TRANSITORY ARTICLE. That portion of export duties on nitrate which is payable in gold shall be paid in current money, with the surcharge ruling on July 7, on

shipments made on account of sales contracted for in current money before that date.

The contracts for the sales of nitrate mentioned in the foregoing paragraph shall be presented to the Government treasury office in Valparaiso, within three days from the promulgation of this act, or, within ten days, to the accountant's office of the custom-house where the policies relating to the shipment have to be dispatched, in order that they may be noted; and a copy of the contract shall be left at the office.

The treasury office in Valparaiso shall remit to the respective custom-houses copies of the contracts which it has noted.

Contracts not presented within the term specified shall be subject to common law.

COFFEE CROP OF BRAZIL.

The following statistics in regard to the Brazilian coffee crop for the year ending June 30, 1898, may be of interest:

Receipts.

Rio:	Bags.*
Per railroad	2,300,690
Per coast steamers	840,099
Harbor (bay) and other craft	1,163,849
In transit	232,941
Total	4,537,579
Santos	6,152,594
Victoria	(†)
Bahia	(‡)
Ceara	(§)
Grand total	10,690,173

Shipments to foreign countries.

From Rio:	Bags.
To the United States	3,004,649
To Europe	1,260,611
To the Cape of Good Hope	149,300
To the River Plata and west coast	101,533
Total	4,576,093
From Santos:	
To the United States	1,356,027
To Europe	4,659,490
Total	6,015,517
From Victoria:	
To the United States	379,962
To Europe	51,367
Total	431,329
Grand total	11,022,939

* Bags of 60 kilograms, or 132 pounds.
† Not obtainable.
‡ Not obtainable; probably 250,000 bags.
§ Insignificant; probably 20,000 bags.

Estimated at an average of $8.75 per bag, the value of this export amounts to $96,450,716.25.

During the last five calendar years the exports from Rio show the following figures:

Year.	To the United States.	To Europe and other countries.
	*Bags.**	*Bags.**
1893	1,627,899	811,006
1894	1,748,784	923,174
1895	1,780,091	983,636
1896	1,724,498	1,060,460
1897	2,450,836	1,615,898

*Of 60 kilograms, or 132 pounds.

During the last three calendar years, the shipments of coffee from Brazil were as follows:

From—	1895.	1896.	1897.
	Bags.	*Bags.*	*Bags.*
Santos	3,554,696	4,156,567	5,621,762
Rio	2,763,720	2,784,958	4,066,734
Victoria	307,438	273,255	372,221
Bahia	264,775	260,981	292,480
Ceara	20,202	6,000	6,568
Total	6,910,831	7,481,761	10,359,765

The New York prices per pound during the last crop year for quality No. 7 (spot) in New York decreased steadily from 7 1/16 cents on July 1, 1897, to 5 1/8 cents on May 1, 1898. On July 1, 1898, the price had advanced slightly, to 6 1/4 cents.

On June 30, 1898, the stock was distributed as follows:

	Bags.
Rio	268,167
Santos	316,793
New York, Baltimore, and New Orleans	643,000

On the same date, the world's visible supply was calculated at 5,436,000 bags, which is an equivalent to about one-half a year's consumption.

There is a heavy overproduction of coffee at present, which could not fail to have a depressing influence on prices. This condition has made itself particularly felt during the last two years, although the cause of it dates much further back. During the ten years prior to 1897, the market price of coffee afforded an extraordinarily large profit to the planters. The consequence was an enormous increase in the area of coffee plantations during the "boom." Now, these additional millions of trees commence to bear, irrespective of demand and prices, and what was until recently an industry which

sometimes yielded a profit of as much as 150 per cent per year, is at present barely self-sustaining. For the next year, however, a much smaller crop is expected than that of 1897–98, or even that of 1896–97. The old experience repeats itself—two consecutive abundant crops are, in consequence of the exhausted condition of the trees, generally followed by a light harvest.

For the crop year 1898–99, there are two estimates, the "official" and the "commercial," which differ considerably.

The figures are:

State.	Official.	Commercial.
	Bags.	*Bags.*
Rio	2,500,000	3,000,000
Santos	4,500,000	6,000,000
Total	7,000,000	9,000,000

From this, it will be seen that even the highest estimates are over 1,500,000 bags less than the crop of 1897–98.

Recently, the coffee plantations of Brazil have attracted the attention of European capitalists. English (and some Belgian) syndicates have bought large plantations in the States of Minas Geraes and São Paulo. In Antwerp, an association has been established with an agency at Santos, for the purpose of buying coffee from the planters direct and retailing it in Europe without the employment of a middleman.

Towards the end of October, a large body of British merchants, capitalists, engineers, and agricultural experts are expected here and in Santos, and they will then travel through the interior of Brazil, for the purpose, as it is rumored, of buying up bargains in agricultural and industrial properties. At the prices at which such properties are offered at present, profitable investments may be made, according to the opinions of the best-informed men, by such capitalists as are not obliged to rely on immediate results. Thus, the British, who already occupy a dominant position in Brazilian finances and commerce, may—partly through the exchange market, partly through ownership of a vast share of the productive area—succeed in gaining a controlling influence over the coffee trade between Brazil and the United States, if no counteracting influence should intervene.

EUGENE SEEGER,

RIO DE JANEIRO, *July 25, 1898.* *Consul-General.*

The acting vice-consul at Santos, Mr. Rosenheim, sends, under date of July 27, 1898, a report upon coffee in Santos, the most important details of which are covered in the report just printed.

RESOURCES OF BRAZIL.

Consul-General Seeger sends from Rio de Janeiro, under date of August 3, 1898, an article on the economic condition of Brazil, written at his request by Mr. L. Lipman, a well-informed local authority. Mr. Seeger has translated the article and made some annotations, and he adds that from his own observations he is led to indorse Mr. Lipman's views. The article reads:

BRAZIL.*

Brazil, possessing a vast territory, situated in the torrid and temperate zones, with large plateaus rising to a considerable distance above the level of the sea, and watered by innumerable streams, many of which are navigable, has every species of animal, vegetable, and mineral product.

The animals exist almost entirely in their natural state, there being very little evidence that the hand of man has contributed to the improvement and development of the different races and species. Advantageously scattered throughout the different regions of Brazil, there exists a larger number of cattle than is to be found in the Argentine Republic, the greater part being in an undomesticated state. Horses are found principally in southern Brazil, but in the central and northern States are also to be found specimens that are extraordinarily hardy and that show by their spirit and beauty the oriental blood of their ancestors. Much progress has been made in mule breeding, and mules are employed for nearly all the services requiring animal traction. The natural conditions of the country are favorable for hog breeding, an industry which receives more or less attention in all the States of Brazil. Large flocks of sheep roam over the plains, and in the interior districts of the north goats abound, affording sustenance to the greater part of the population.

Game is found in inexhaustible abundance here† in immense virgin forests.

The seas which bathe the coast to a length of over 1,200 leagues, and the innumerable streams that flow through this vast region, are stocked with the richest fauna with which nature has endowed the world. Agassiz, on the occasion of his visit to this country on a mission from the Government of the United States, recognized that the maritime and river fauna of Brazil is simply incomparable.

In vegetable productions, Brazil is unequaled. Every known species is either already found here or may be readily acclimated, on account of the great variety of soil and climate.

The woods have great beauty and durability and can be used in various industrial applications.‡

The utilization of these woods and of the valuable resins which many of them contain is an industry still in an embryonic state.

---

* Translated from the Portuguese by Eugene Seeger, consul-general.

† Ornithologists count 1,680 species of birds in Brazil, one-sixth of the number known in the whole world.

‡ A profitable business might be done in the shipment of Brazilian hard woods to the United States. This business is at present, so far as my observation goes, almost exclusively confined to rosewood; but there are many other fine cabinet woods in Brazil, some of which are much cheaper and even more beautiful. In order to conduct this business successfully, it would be necessary to take steps for making these woods known in the United States, for obtaining in Brazil a regular supply, and for reducing expenses of transportation.

Every kind of fruit may be grown, and among those native to the soil are many unknown in the Old World, of exquisite flavor.

On the banks of the Amazon and its tributaries, on the Paraguay and San Francisco, are many varieties of rubber-producing trees, and, notwithstanding the neglect they have received, the supply is apparently inexhaustible. Cacao, Brazil nuts, and other valuable forest products are found in abundance.

The mineral wealth of the country is too well known to require a long dissertation on this subject. Gold, silver, mercury, iron, copper, topaz, rubies, marbles and granites of various qualities and colors, agate, manganese, phosphates, petroleum, graphite, etc., not to mention diamonds of the first water and onyx unequaled for beauty, are found; but mining is now neglected, being practically confined to a few English companies. In many districts, monazite is found. The Prado sands in Bahia, near the coast, accessible for purposes of transportation, contain 83 per cent of monazite. Others which are not so rich or have not yet been analyzed are found in the States of Minas, Goyaz, Matto Grosso, Rio de Janeiro, Bahia, and São Paulo. The working of the Brazilian coal mines is likewise still in an embryonic state. In the opinion of Mr. Nathaniel Plant, there are in Rio Grande do Sul mines containing coal equal in quality to the best Cardiff.

Many causes have contributed to hinder the rapid and natural development of this vast and wealthy country, but the chief is a lack of systematic and energetic effort, and also probably a lack of sufficient capital.

The sugar-cane industry has not been developed. Cotton grows in every part of the country, but the production is decreasing. Breadstuffs are produced in a quantity insufficient for home consumption. The production of coffee, however, has increased to such an extent as to create difficulties which contribute to the crisis now prevailing in Brazil.*

In regard to colonization, it may be said that up to the present time, imperfect experiments have been made, mostly in the torrid, instead of the temperate, zone, without the least regard to sanitary conditions. The wealth of the different States is well known, but it seems to me that it would be well to proceed methodically and practically—that is, to commence in the State of Minas Geraes, in the torrid zone, and in that of Rio Grande do Sul, in the temperate zone.†

It may perhaps be said that the State of São Paulo, which, through the enterprise of its population, had already, in the time of the Empire, taken the lead and had distanced all the other provinces of the Empire, may still be able to maintain the supremacy which it then acquired. Unfortunately for that State, its whole wealth now depends on one specialty—the culture of coffee. The successful experiments in the cultivation of this plant, made in the different European possessions in Asia,

* At one time, the Brazilian planters produced nearly all the food products they required for home consumption, and some sent a considerable quantity to the market. The emancipation of the slaves, however, created temporary labor difficulties, and at the same time caused the rural districts to be infested by a large vagrant population which committed depredations on crops and stock. The cultivation of food products was abandoned, but these conditions have been gradually improved, and the overproduction of coffee is now forcing the Brazilian agriculturist to diversify agriculture so as to produce the food stuffs necessary for home consumption.

† The work of colonization by the National Government did not begin, as the writer supposes, in the torrid zone. It was first limited almost exclusively to the provinces of Rio Grande do Sul, Santa Catharina, and Rio de Janeiro. In the latter State, the flourishing German colonies of Petropolis, Theresopolis, and Nova Friburga were established as early as fifty years ago. Subsequently, the demand for labor on the newly opened coffee plantations in the west of São Paulo led to the introduction of a large number of immigrants into this State and the comparative neglect of the colonization in the southern provinces. Lately, the immigration into Brazil has fallen off very considerably, that of Teutonic and Anglo-Saxon origin having almost entirely ceased. This fact is due to the extremely "hard times" now prevailing in Brazil, and also to the fact that the National Government, as well as the State governments in the south, are at present financially unable to grant substantial assistance to emigrants.

Oceanica, Central America, and Africa, have caused low prices, and the economic condition of the State has suffered. Moreover, the port of Santos and different districts in the interior are devastated by yellow fever.

On the other hand, Minas Geraes is one of the tropical States where sanitary conditions are favorable, and, peopled as it is by 4,000,000 inhabitants,* it will certainly become in the near future the most important commonwealth of tropical Brazil. Situated in the interior of the country, connected with the ocean by means of railways through the States of São Paulo, Rio de Janeiro, and Bahia, enjoying a delightful climate, and endowed with enormous mineral, vegetable, and animal wealth, it stands on the threshold of a great future. All products of the torrid and temperate zones may be grown, from rubber to wheat, indian corn, and tubers of every species.

There are already a number of vineyards, and it is to be expected that in the course of time Brazilian wines will partly replace those which are now imported. In Minas Geraes, colonization, it would seem, is a logical result of natural circumstances, since the colonist will find in certain districts natural products growing wild, from which he may derive an almost immediate income. The greater part of the State is adapted to stock breeding, and the present number of cattle may be increased tenfold. The same may be said of horses, sheep, etc., not to mention hogs, the breeding of which already constitutes an important industry.

An abundance of water power is available, and by utilizing the rivers it will be easy to effect a complete transformation in means of communication.

The State of Rio Grande do Sul, which is situated in the temperate zone, has more than 1,500,000 inhabitants.† Besides being able to produce everything that is produced in the River Plata countries, in the northwest of the State and on the River Uruguay are valuable forests; and in mineral products it is far richer than the Argentine Republic. It must not be forgotten that formerly this State, besides supplying both Uruguay and the Argentine Republic with wheat, produced a surplus for export. A drawback is the lack of good ports with water of sufficient depth to admit vessels of any draft. Moreover, Brazil, having permitted wheat to be imported free of duty and having likewise, by its constitution, prevented competition in freight rates in its coast trade, has interfered with the progress of its southern States and favored those of the River Plata. The construction of a deep-water port at Chuy, at the extreme southern limit of Brazil, adjoining the frontier of the Republic of Uruguay, would transfer to Brazil the coast trade which is now tributary to the River Plata.

Taxes in Brazil are not more than a tenth of those in the countries of the River Plata. To exploit Brazilian trade, American and European merchants send here men without experience and without knowledge of the language of the country, and companies send engineers who are often no better. Would it not be advisable for the development of these enormous resources and for the American trade with Brazil to organize a syndicate comprising capitalists, manufacturers, and others to establish a permanent exhibition of machines, models, and of samples of all articles that may be furnished to the agricultural population in the districts intended to be developed? It would be of great benefit to American trade if there should be established at Pelotas, the principal city of the State of Rio Grande do Sul, a permanent exhibition of American implements and machinery. Another such depot might be established with profit in Rio de Janeiro for supplying Minas Geraes and other States. I am convinced that in a short while such a syndicate would be eminently successful and in a position to extend its operations to other

* According to official statistics, the State of Minas Geraes had 3,184,099 inhabitants at the end of 1890.

† At the end of 1890, according to official figures, this State had 897,455 inhabitants.

States, for it must not be forgotten that Brazil is obliged by imperative necessity to confine its coffee culture within its present limits, and to diversify its agricultural industry.

Consul-General Seeger adds:

I regard with much favor the proposition of organizing an American syndicate for business operations in Brazil. While the present financial and commercial depression is unfavorable to new industrial ventures and to rapid increase in the sale of American merchandise in Brazil, it offers, on the other hand, excellent opportunities for the investment of capital in industrial enterprises already established, on terms much more favorable than could be obtained when the country is once more placed on a solid financial basis. European capitalists, especially British, are for these reasons making investments here.

American capitalists ought to combine to send financial and technical experts to this country—men of experience and mature judgment, who speak the French and Portuguese languages—and let them look around in Rio, in Minas Geraes, in Parana, in Santa Catharina, and Rio Grande do Sul. There is no lack of opportunity for good investments. This is also a good time for the preparatory work that may lead to permanent commercial relations at the time of a general trade revival, which is sure to come sooner or later.

A great deal of harm has been done lately by adventurers who come here from the United States, with a great flourish of trumpets but without any means, experience, or knowledge of French or Portuguese. They bring a great variety of "samples" (easily convertible into cash) from manufacturers anxious to extend their trade in Brazil. Such unscrupulous and ill-prepared agents can only harm American prestige in this market.

In this connection, I would advise our export associations to quit sending circulars here (which are never read) and to establish a monthly or weekly American trade paper in Rio in the Portuguese language. Such a paper could easily be made self-sustaining, and, if properly conducted, would pave the way to closer business relations between the United States and Brazil.

BIDS FOR COAL IN BRAZIL.

Under date of August 10, 1898, Minister Bryan sends from Petropolis translation of the advertisement for coal for the Brazilian Central Railroad, which was referred to in his cablegram of August 8,* as follows:

By order of the directory, it is made public that on the 31st of October next, at 1 o'clock p. m., proposals will be received for 120,000 tons of first-quality coal for the consumption of the railroad during the next year.

---

*See CONSULAR REPORTS No. 217 (October, 1898), p. 309.

Each proposal will be accompanied by a certificate of deposit, as guaranty, of the amount of 5,000 milreis (about $750 at the present rate of exchange), previously made in the treasury of the railroad, and this guaranty will be turned into its coffers if, after the proposal is made, the bidder shall refuse to sign the contract in accordance therewith.

The bidders must present themselves in this department upon the day and hour above indicated, bringing their proposals closed, written in black ink, duly sealed, dated, and signed, which will be opened and read in their presence.

The conditions of the contracts are the following:

(1) The contractors bind themselves to furnish coal of the first quality, coming from the mines of Cardiff or from others which furnish an article of equal quality, which fulfills the required conditions, recently mined, three times screened, which does not give more than 4 per cent of ash nor contain more than nine-tenths of 1 per cent of sulphur, and has a calorific power not less than 8,100 calorics per gram by Thompson's calorimeter, all of which will be verified by analyses and experiments made by the administration of the railroad, and by anyone it may designate.

(2) Coal which, submitted to analysis and experiment, does not show the qualities specified in the preceding section will be rejected by the contractors and other coal of required quality substituted, so that the railroad shall not remain unprovided; in which case it shall supply itself in the market, the difference in price being placed to the account of the contractors, besides the penalty that they shall incur.

(3) The coal must be furnished in large pieces, not more than 5 per cent of a size smaller than 30 cubic inches being admitted. The verification of this section shall be made in whatever manner the administration of the railroad may find convenient. If the amount of small coal in each shipment is larger than that provided for, all the coal shall be screened (the cost thereof to be paid by the contractor) in such a manner that the quantity of pieces smaller than 30 cubic inches shall be in the proportion provided for.

(4) The coal may be delivered, as shall be agreed upon, at the sides of the ships or at the bridge or wharves of the maritime station of Gamboa, in quantities corresponding to the rate of 19,000 tons a month, not exceeding on any day 500 tons, and with the express stipulation in the bills of lading that the discharge per working day shall not exceed 250 tons. In the first case, the transport by lighter from the ships to the bridge or wharves and to the coal cars or warehouses shall be made on account of the railroad; in the second, this last operation may be made by the employees of the said railroad or by the contractors, as its administration shall determine, notice being given at least three days in advance.

(5) The prices shall refer to the English ton of 1,015 kilograms (2,237.66 pounds*) for coal delivered in each of the cases mentioned, customs duties not being included; the shipments destined for the railroad being effected by its employees.

(6) In case of a strike of the laborers in the mines served by the port of Cardiff, the contractors will be obliged to continue to furnish coal, coming from another place, at the price contracted, the quality to be equal to the best that is used upon the English railroads.

(7) The payments will be made at the treasury of the railroad in national currency, within eight days after the delivery of each shipment, and at the rate of exchange of the day preceding the payment, the price being stipulated in pounds sterling.

(8) Delivery must begin in the first two weeks of January, 1899, and end in December of the same year.

---

* The British ton is 2,240 pounds.

(9) The directory of the railroad shall have the right to increase or diminish the quantity to be furnished monthly up to 20 per cent, previous advice of sixty days being given to the contractors.

(10) The contractors, to guarantee the execution of the present contract, shall deposit in the treasury of the railroad, upon signing it, the sum of 40,000 milreis (about $6,000) or its equivalent in gold, to make effective the penalties that they may incur; and they shall be obliged to make good this amount every time that it suffers a reduction. It is permitted to substitute for this deposit at any time bonds of the public debt, duly guaranteed. Deposits in money shall not draw interest.

(11) Upon failure to fulfill any of the stipulated conditions, the directory of the railroad may impose a penalty upon the contractors of 2,000 to 20,000 milreis ($300 to $3,000), according to the gravity of the default.

(12) Suspension of delivery for more than a month, or an attempt to supply an article of inferior quality, will give the directory the right to rescind the contract, and the deposit provided for by section 10 will be forfeited and will revert to the coffers of the railroad.

(13) From the acts and decisions of the directory of the Central Railroad of Brazil, the contractors can appeal to the Ministry of Industry, Transportation, and Public Works.

MANOEL FERNANDES FIGUEIRA,
Secretary.

OFFICE OF THE DIRECTORY
OF THE CENTRAL RAILROAD OF BRAZIL,
August 6, 1898.

Copies of the advertisement have also been received by the Department from Consul-General Seeger, of Rio de Janeiro, under date of August 21, 1898. Mr. Seeger adds that the original advertisement called exclusively for Cardiff coal, but that he succeeded in having it changed so as to read "Cardiff, or of equal quality." He continues:

I see in the Diario Official of August 9 that a contract for the supply of 10,000 tons of such coal has just been awarded to the Brazilian Coal Company, Limited, at the price of 30s. 6d. ($7.41) per ton free in port of Rio.

Prospective bidders ought not to fail to send adequate samples and a chemical analysis, duly certified before a Brazilian consul.

There can also be sold from 1,000 to 2,000 tons of coal every month by our dealers to various large consumers in Rio, if proper quality be furnished. I have been told that most of the American coal heretofore shipped here could not be used in the factories or by the railroads without a change in the grates in common use, and that this was one of the obstacles in the way of American dealers. While I am not prepared to judge the merits of this assertion, I believe the Brazilian coal market well worth intelligent and energetic efforts on the part of our dealers.

AMERICAN COAL IN FOREIGN COUNTRIES.

The British coal trade in the West Indies has, according to the appended "special" in the London Morning Leader of August 13, been captured by American coal exporters, and they are now entering the South American markets.

I inclose also an article on the possibilities of American coal competition which appeared a couple of weeks ago in the British Coal and Iron Trades Review. The discussion is from an expert standpoint, and shows incidently that conditions in Belgium are much like those in Great Britain.

MARSHAL HALSTEAD,
Consul.

BIRMINGHAM, *August 16, 1898.*

[From the London Morning Leader, August 13, 1898.]

BRITISH COAL TRADE IN DANGER.

A question of considerable importance is occupying the attention of frequenters of the coal exchange just now. It is being suggested that there is a reasonable possibility that in a few years America will have outstripped us in the production of coal, just as she has already outstripped us in the production of pig iron and steel.

Coal has come to this country from the States before; and at this moment quite a number of steamers are under charter for bringing coal from across the "herring pond."

Welsh supply not indispensable.

"It shows quite conclusively," said one of the heads of a well-known city firm to a Morning Leader representative who made inquiries at the coal exchange and came across the agent of the American exporters, "that the demand for American coal is extending at a very rapid rate, and the longer the Welsh dispute continues the more clearly will it be brought home to the country, not only that there does exist a perfect substitute for Welsh coal, but that if they never go to work again the world will be able to get on without them.

"I say this," the speaker continued, "with sincere sorrow, because naturally I would prefer to see our coal trade flourishing and progressing rather than suffering at the hands of the competing outsider. And that it will permanently suffer as the result of a prolonged struggle is absolutely certain.

Loss of West Indian market.

"Of course, in England, American coal can not be sold as cheaply as our own coal, but in other countries which have hitherto depended upon us the case is very different. Take the West Indies as an instance. Large quantities of American coals are being shipped there, and the geographical position of the country renders it extremely likely that if the coals are found suitable the West Indies will afford a permanent market. Indeed, I would go further and say that already the American coal is actually in possession of the West Indian market, for practically the only coal used there from this country is for admiralty requirements.

"Again, in South America and South Africa American coal is becoming more and more popular."

[From the British Coal and Iron Trades Review.]

THE PRODUCTION AND EXPORT OF COAL IN DIFFERENT COUNTRIES.

A valued correspondent in the United States has sent us some recent information on the subject of the cost of the production and distribution of coal in that country, from which it appears that the prospects of incurring an invasion of American cheap coal in European markets are drawing perilously near. Not only is the cost of producing American coal getting less every year, but the rates of freight charged for the transport of coal from mines to tidewater have recently been falling at a remarkable pace.

So far as the cost of producing coal is concerned, the United States have many manifest advantages over ourselves. They have more virgin fields to work on, more effective labor—in so far as longer hours and a much larger annual output per worker enable this to be determined—much fewer legislative or local restrictions, more modern plant, as a result of a later development enabling the newest designs, methods, and appliances to be employed, and, in a majority of cases, a smaller initial cost for a given annual product. All these advantages are likely to be continued for many years to come, and they become more apparent every year. On the other hand, Great Britain is not the only European country in which an opposite condition of affairs is to be found. So far as Belgium is concerned, the following observations are extracted from an article published in a recent number of the Organe Industrielle, of Liege:

"Are we not in Belgium persistently trying to increase the cost price of our coal? On the one hand is labor agitation, which diminishes the effective force of the workmen; on the other, are the communes (local governments), which are burdening our coal mines with special and exceptional taxes, and which have a daily increasing tendency to make them (the mines) pay imposts which ought in justice to be distributed among all citizens. Then there are the courts, which, in a humanitarian spirit, always inclined to find the proprietor in the wrong, weigh down our enterprises with an excessive responsibility, in many cases allowing exorbitant damages. Finally, there are the prescriptive regulations, which become a source of expense; lawsuits, involving considerable expenses; regulation follows regulation; communal taxes are higher every year; the labor agitators continue their nefarious work, and the workmen never cease to make extravagant requests. In short, the day will come when the cost price will be so high that owners will be obliged to sell with loss, and when the deficit shall have attained certain proportions the doors of the establishments will close and the workmen will find themselves in the street. How many coal mines are there in Belgium where the cost price has not reached its last limits? How many will be obliged to close within a short time if this dangerous state of affairs does not change? Here is an inevitable disaster, for sale prices are determined by competition, and our agitators have not yet found a way to bring the buyer to pay dearer in one place for what he can obtain cheaper in another. Is it practical, then, to feed the communal treasuries with the product of taxes coming from owners, to demand an increase of wages, to speak of the minimum of wages, to have a legal limitation of the hours of labor? There will soon be no more industry, work, or wages; general misery will have been inaugurated."

British coal owners might readily suppose that all this was meant to be a faithful and exact description of their own parlous circumstances, but it seems that we are not alone in our misery and our misfortunes. Hitherto not much American coal has actually been landed in Europe; but an increasing consumption goes to the supply of Atlantic steamers, which would otherwise have consumed British fuel, so that the actual consumption must be considerable. The marvel is that, in view of the present crisis in the South Wales coal field, so little American coal has

hitherto been shipped to Cardiff and other Welsh ports. The coal of West Virginia is of good quality; it can be delivered at 5s. 6d. per ton at Pensacola or Mobile, and 2s. 6d. to 3s. 6d. more should land it in English waters, making a total of 8s. 6d. to 9s. per ton free on board here, against 9s. 6d. to 10s. 6d. for Welsh coal. It has recently been suggested that the coaling stations of the world can be supplied as well from western Virginia as from Cardiff and the Tyne. We do not quite admit this to be a fact; but we do believe, in the words of a special report recently made by Sir Julian Pauncefote, that "on the one hand the almost unlimited resources of the coal fields of the United States, the excellence of the quality of the coal, the possibilities in the system of mining, and greater reductions in the cost of freight; on the other hand, the immense amount of coal consumed within the United Kingdom, the recent increase in the average of value at the pit's mouth, and the great losses suffered during the coal crisis, form considerations which tend in the direction of the establishment of trade relations of such a nature abroad as may result in a great development of the export of coal from the United States."

COAL STRIKE IN SOUTH WALES.

The strike of the South Wales coal miners, which began on the 1st of April, was caused by the failure of the Coal Masters' Association to accede to the demands of the miners for increased wages.* Attempts were made, from time to time, during the course of the strike, to adjust these differences, but without success. The employers from the first refused to submit to arbitration the matters in dispute, and offered the men an 8¾ per cent sliding scale—that is to say, an advance of 8¾ per cent upon what is termed the standard basis of 1897, for every shilling advance in the price of coal—with 5 per cent advance upon the rate of wages paid up to the end of March last (12½ per cent above the standard), and equivalent to 17½ per cent above the standard wage. The operatives rejected this offer and asked for a minimum wage of 22½ per cent above the standard referred to.

Sympathy with the workmen and their friends was manifested to a great extent throughout the country on the part of the trades unions, and thus close upon 750,000 people were kept from starvation.

The terrible suffering can hardly be exaggerated; but, strange to say, no scenes of violence were witnessed in any part of the coal field. Welsh miners in this respect are unrivaled. Yet, one of their leaders has this week been sentenced to two months' imprisonment with hard labor for organizing a procession having for its object the intimidation of a few "blacklegs" in connection with a colliery dispute prior to the strike. Great indignation is evidently felt among the workmen, but they content themselves with adopting

*See CONSULAR REPORTS No. 213 (June, 1898), p. 269.

constitutional means of directing the attention of the Home Secretary to the desirability of reducing the sentence—with what result remains to be seen.

The effects of the strike are far-reaching. All the naval coal supplies were obtained in this district, and, owing to the scarcity, the British admiralty adandoned their naval review this year; and the channel fleet being in need of fresh supplies, other coal is now being tested, and the best of this will be chosen for naval purposes forthwith. The coaling stations throughout the world are affected, and in some instances are said to be almost depleted. Inland, not only have the prices of other coals advanced, but great inconvenience is experienced, especially in London, in consequence of the volumes of smoke emitted wherever steam power is used; and the newspapers report convictions in the police court against steam-packet owners and others, on the score of having created nuisances.

In this way, an opportunity has been afforded for the introduction of Pocahontas coal into London, and the making of coal contracts with American shipping firms. A sailing vessel has just cleared at this consulate in ballast for Norfolk, Va., to load a cargo of coal for Australia.

The prices obtained for coal are still inflated, but are now below $4 per ton free on board, and the few nonassociated collieries at work are reaping a golden harvest by doubling their output and enjoying the benefits of enhanced prices. The workmen employed hand over their 20 per cent advance of wages to the strike relief fund, and thus have aided considerably in prolonging the struggle. The ports most affected are Cardiff and Newport; whereas before the strike commenced a number of steamers called here for bunker supplies en route for the United States, comparatively few have done so since the strike began.

I append a clipping from a local newspaper, and it will be seen from the comparative figures that the exports have been greatly reduced by the coal war:

Comparative statement of coal shipments from South Wales.

Month.	Cardiff.	Newport.	Swansea.	Llanelly.
	Tons.	*Tons.*	*Tons.*	*Tons.*
January	1,085,005	283,219	118,356	15,084
February	1,053,240	221,240	82,340	10,070
March	1,128,650	246,057	116,413	10,298
April	287,296	40,033	73,778	12,541
May	318,497	28,348	92,300	20,138
June	300,223	24,761	104,373	15,261
July	314,079	29,604	125,686	19,710

Comparative table of coal exports.

Port.	July, 1898.	July, 1897.
The Tyne.	*Tons.*	*Tons.*
Newcastle	298,840	260,247
South Shields	211,591	296,736
North Shields	59,026	34,161
Total	569,457	591,144
Welsh.		
Cardiff	314,079	1,137,835
Newport	29,604	288,794
Swansea	125,686	128,109
Llanelly	19,710	15,963
Total	489,079	1,570,701

DANIEL T. PHILLIPS,
CARDIFF, *August 12, 1898.* *Consul.*

Since this report was written, Mr. Phillips has sent a supplementary article, dated September 2, 1898, in which he says the great strike came to an end September 1, 1898, by the miners accepting the masters' terms. Although nothing, he says, appears to have been gained by the miners, too much praise can not be given them on account of their excellent behavior, notwithstanding their great sufferings during the long strike. It is estimated that the cost to the collieries has been $30,000,000.

BICYCLES IN SCOTLAND.

Bicycles are used in this consular district chiefly by the wealthy and middle classes. During the past year, a marked increase of the sale of cycles is noted, many now being purchased by people of what might be termed the poorer classes, among whom there seems to be a growing demand for a strong wheel at a fair price. The country roads in this locality have an excellent surface, are well kept up, and, although hilly in places, there are long stretches of a gently undulating character, divided now and then by fine level runs; so that, take them all in all, a cyclist would pronounce them good.

No duties of any kind are imposed on imported bicycles or supplies. Most of the bicycles in use here are of British manufacture, and range in price from £10 to £20 ($48.66 to $97.33), the greatest demand being for medium-priced machines.

There is a strong prejudice in this section of Scotland against the American bicycle. The wooden rim is believed not to be adaptable to the damp climate, and the lightness of the various parts of the American-made cycle, in comparison with the British make, is not looked upon favorably by a conservative people, who have been accustomed to a heavier grade of bicycles. They need to be educated to the fact that Yankee ingenuity and skill have produced a bicycle adaptable to any climate and that for strength, durability, lightness, and speed can not be surpassed.

To overcome this prejudice, American bicycles should be placed in the hands of dealers who are thoroughly convinced of the merits and superior qualities of the better grade of our wheels, and who, at all times, will be prepared to properly repair American cycles and to furnish any part or parts of the same when called for.

This is very important, as purchasers of American bicycles are often discouraged by biased repairers, who claim that new parts are not obtainable, and, owing to the foreign make, the cost of repairing involves extra trouble and expense.

Any enterprising dealer who would undertake to handle the better grade of American bicycles exclusively would soon arouse lively competition in the cycle trade here and convince the public of their superiority over the more clumsily built British wheels, and thus place the American cycle in its proper position in this market.

Unfortunately, among the earliest shipments of American bicycles into this consular district, there were some of a very inferior grade, apparently made to be sold in a foreign market at a low price. This was a serious mistake, as reputable dealers, who recognized the excellence of the high-grade American cycle, found it next to impossible to overcome the unfavorable impression created, and were obliged to confine their efforts to the sale of bicycles of British make.

I find that bicycle accessories of American manufacture are handled in a greater or less degree by most dealers, and are considered highly satisfactory. Very few, however, import directly, most of them receiving their supplies through London importers. I have found but one dealer who receives his bicycles and supplies direct from the United States. He speaks very enthusiastically of the merits of American bicycles, and assures me that he prefers to deal directly with the American manufacturer, having found by experience that it is greatly to his advantage to do so.

The following are the addresses of the principal cycle dealers and agents here: James Bonnar & Son, ironmongers, High street; A. Dawson, ironmonger, High street; Ireland & Co., ironmongers, Bridge street; Dunfermline Cycle Depot, Queen Anne street; H. Robertson, gunsmith and cycle dealer—of Dunfermline; and D. R. Rob-

ertson, ironmonger; James Grubb, ironmonger; Barnet & Morton, ironmongers; J. Wilson & Co., ironmongers; The Neilson Cycle Company; A. A. Hay, cycle agent; J. Rutherford & Co., cycle agents, St. Clair street—Kirkcaldy.

J. N. McCUNN,

DUNFERMLINE, *September 8, 1898.* *Consul.*

FRANCE AS A MARKET.

The following is a copy of an undated report by Consul Brunot, of St. Etienne, made in answer to requests for information from the Philadelphia Museums:

In a recent publication on the subject of extension of markets for American goods, it was alleged, in effect, that the older European countries might be considered as exploited territory, already well supplied and but little likely to return a reward for the efforts of Americans seeking new outlets for their products. It is to be hoped that such a statement will not be generally accepted. It is far from being true in this section of France, at least, and doubtless in other parts of Europe as well. The success achieved in many well-known lines indicates altogether a contrary state of affairs. Europe needs the best goods in the world's market, and in many instances the superiority of American manufactures is not to be longer questioned.

As long as farming is carried on with wooden plows and ox carts, made after the style of Cæsar's time, there is room for modern utensils. Plows and ditching machines are needed here.

The modern farm wagon would accomplish more towards relieving the agricultural depression than will government subsidies. If there is any good reason why American light road vehicles should not be preferred to the weighty carriages now in use, it is not apparent. The French two-wheeled freight cart, drawn by two horses, hitched tandem, is so heavy that the full strength of one animal is required to support the ponderous shafts and to steady the ungainly vehicle. The other must draw the load alone, the waste of power being evident. Were it not for the excellence of the almost level roads, such means of transport would be impracticable.

Wooden shoes are the usual foot wear in the interior of France, and are not an exception even in the towns.

Paper products of certain classes might find a market in St. Etienne, Le Puy, Montbrison, and Lyons; especially packing and wrapping papers, ribbon rolls, piece-goods wrappers, lace rolls, dry-goods box stock, cardboard, and a peculiar grade of pulp board used by "liseurs," or pattern makers, for looms. There is no paper-box machinery in this city; though immense quantities of small dry

goods boxes are used, they are entirely handmade. Steam-laundry machinery is unknown in the interior cities of France. All the washing is done in a primitive way, by women at the edges of streams, which often happen to be several miles out of the cities.

Barber's chairs, if introduced, would be the cause of bringing down blessings upon the American inventor.

Roller window shades might succeed in replacing the present suffocating tapestry hangings, especially among unpretentious householders.

England still enjoys the local reputation for building the best steam engines in the world, though they are often but copies of American designs.

American brick machinery should be able to supersede old hand methods, here as elsewhere. File cutting and bolt machines might also be considered favorably by local French mechanics.

Building hardware is another subject that deserves attention. The ponderous and insecure door and other locks in universal use, even in new buildings, would be museum curiosities in America; they are a perpetual nuisance here. (The writer's bunch of keys, five in number, necessarily carried about all the time, weighs a trifle more than 8 ounces.)

There are but two elevators in the city, and one of these is more than out of date. Yet lofty buildings are the rule for both factories and dwelling flats.

It is true that we make and use many articles in America that the French people would have no use for, and which it is fruitless to offer to them at any price; but it is undeniable that exportation to Europe can be expanded in the directions above indicated, and in other lines as well.

TRADE OPENINGS IN FRANCE.

I have translated to a number of fruit dealers the proclamation of President McKinley of May 30, 1898, setting forth the reciprocal commercial agreement* entered into between France and the United States, and they give it as their opinion that they can do a large business in American fruits—dried, pressed, and preserved—if they can be received in France in good condition and at a price not too high. The outlook for the French fruit crop is not very promising, owing to long-continued drought and intense heat. There

* By the terms of this agreement, American canned meats, table fruits, dried or pressed fruits (excluding raisins), common woods, paving blocks, staves, hops, manufactured and prepared pork meats, and lard and its compounds are admitted into France at the minimum rate of duty, in return for a decrease in the United States duty upon argols, certain alcoholic liquors, and oil productions coming from France.

ought to be an especially good market for American apples here, as they have been incredibly high during the past year.

The dealers wish me to obtain for them, as speedily as possible, answers to the following questions:

What will be the wholesale price of apples, pears, prunes, grapes, lemons, oranges, cedrats; and their varieties?

How will they be packed?

Are the grapes hard enough to stand the journey to France?

Give particulars as to quality, and how fruit may be preserved for winter use, etc.

All estimates of prices must be based upon kilograms and not upon any of our measures. The kilogram is equivalent to 2⅕ pounds avoirdupois.

Boards, planed, about one-half inch thick, regardless of length or width, would find a large market in Lyons. At present they are brought from Switzerland, where the price is fixed every year by the Forestry Commission. After this price is determined our producers ought to be able to get some of the trade. These boards are used here for silk packing boxes. The manufacturer arranges his goods in piles in his warehouse and a man is called in to make boxes according to the size of the piles, and to pack the goods.

According to the proclamation of May 10, "manufactured and prepared pork meats" are admitted at 50 francs per 100 kilograms, or $9.65 per 220 pounds.

Cheapness in transportation with the minimum loss of time are the essential elements. A dealer here recently received 105 kilograms (231 pounds) of hams from Cleveland, Ohio. They came by way of Liverpool and were forty-nine days in transit. At the end of their journey they were not in a condition to offer in the regular course of trade, yet the merchant who received them spoke very highly of their quality and the way they were packed. He would like to know the lowest price for which they can be laid down in Lyons, and the shortest time for transit. The damaged condition of these goods was the result of warehousing and transshipment at Liverpool.

There is an additional "surtax de pavillon," or flag tax, levied upon merchandise carried in foreign ships. In the above shipment it amounted to $2.94. This tax can, of course, be saved by shipping goods in French bottoms.

No merchandise is received in France which has been in any way treated with borax.

The wine and liquor interests of France necessitate the use of over a million barrels every year, and American staves ought to find a market here.

The dealers in the different articles I have mentioned wish to know

the prices at which our merchants can furnish them. In answer to my questions concerning the prices they pay, they all ask: "For what can you furnish them?" If French dealers can be provided with the bottom figures at which American producers will sell, there is a possibility of opening up a good trade with them.

JOHN C. COVERT,
LYONS, *August 23, 1898.* *Consul.*

AMERICAN MACHINERY IN DENMARK.

From conversations I have had recently with dealers in machinery and tools, I am of the opinion that this market offers good opportunities for Americans. Comparatively large orders have recently been placed with our manufacturers, and if they give satisfaction, American machinery and tools will find ready sale in the Kingdom. Until now, the Germans have controlled this market. Their prices are a trifle lower than ours, but the superiority of American goods is acknowledged.

There is a market here for engine lathes, drilling and boring machines; milling, planing, and shaping machines; slotting machines, boring and turning mills, radial drilling machines, machines for making screws, punching and shearing machinery, grinding and polishing machines, bolt cutters, and American tools of all kinds.

The largest shipbuilders here, who formerly took their supplies from Scotland, have recently placed orders for plates, angles, etc., as well as the greater part of their forgings for smithy purposes, with American firms, and if these trial orders are satisfactory an important market will be gained.

The principal dealers in machinery and tools in Copenhagen are: V. Löwener, 6 Kvästhusgade; Wm. O. Jensen, 6 Jernbanegade; Nieustädt & Co., 20 Vestre boulevard; H. E. Bonne, 28 Vestergade. The commercial agency of P. V. Fournais & Co., Copenhagen, can rate these firms.

JULES BLOM,
COPENHAGEN, *September 7, 1898.* *Vice and Deputy Consul.*

UNITED STATES SHOES IN GERMANY.*

The import of American shoes into Germany, although still rather small, has increased very rapidly within the past eighteen months, and has demonstrated most conclusively the practicability of exporting shoes to this country.

* For previous reports on this subject, see CONSULAR REPORTS No. 211 (April, 1898), p. 490, and No. 212 (May, 1898), p. 132.

Twenty years ago, American shoes were unknown in this country; indeed at that time our shoes were not regarded as superior to those of German manufacture, but the many improvements which have been made in machinery, together with the careful study which our manufacturers have made of style and comfort, have placed our shoes in the front rank. An American can almost always be distinguished in a crowd by his shoes. In 1880, the value of shoes imported into Germany from the United States amounted to $1,666; in 1890, to $9,044; in 1896, it was $39,508; and for the first five months of this year, the total value of the shoes imported from the United States was $59,500. At this rate, the increase for 1898 will not be less than $100,000 over the imports of 1896.

The demand for American shoes in this country has not been created through efforts on the part of our manufacturers, but is very largely due to the influence of some of our consular officers and of Americans residing in this country.

A few of the best stores find themselves compelled to keep a small supply of our shoes in stock; but, as a rule, the storekeepers do not exert themselves to dispose of our products. I know of a number of instances where people in this country order shoes from retail stores in the United States and have them sent over by freight.

About six months ago, I took occasion to write to a gentleman in New York who is interested in the export trade and whose intention it was to make a business trip to Germany, and asked him to open correspondence with several of the largest shoe manufacturers and ascertain if it would be possible for him to secure the European agencies for their shoes. In every instance, this gentleman received the reply that the different firms had really more orders than they could even think of filling, and were in no position to consider foreign connections. There may be some of the smaller firms who could dispose of more shoes, and I would most earnestly recommend them to exert themselves to secure a market for their products in this country.

BRAINARD H. WARNER, Jr.,

LEIPSIC, *August 9, 1898.* *Consul.*

AMERICAN APPLES IN GERMANY.

This is a good year to send American fruits, especially apples, to this Empire. Europe's fruit crop is anything but good. If our merchants will not repeat the folly of former years, by sending poor fruit that decays easily, they can command these markets for years, against all efforts to dislodge them. If Baldwins, Greenings, Russets, and other hardy winter apples are sent, the results will not

remain doubtful. Other apples will not pay for transportation. Had our apple merchants made even a half-hearted effort to enter this market in 1896 they would now be beset with orders. So serious is the situation here, because of the dullness in grain markets, and so decided is the downward tendency of profits in the Empire's wheat production, that farmers are turning to fruit to eke out an existence. The General Union of Agricultural Societies has set itself the task to bring about better methods of handling fruits. Germans, as a rule, have gone in for quantity, r ther than quality, letting their fruit trees run to wood, rather than to fruit.

Imports and exports of fruit.

Year.	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
	Tons.		*Tons.*	
1881–1885	231,682	$9,686,000	150,002	$6,997,200
1886–1890	432,316	21,824,600	107,454	7,735,000
1891–1895	543,905	22,062,600	83,240	6,973,400

Unfortunately, the figures for 1896 and 1897 have not been forthcoming; the former being the banner year for importations of United States fruits, especially apples. The losses caused by the introduction of our fruits, fresh and dried, has been the subject of animated discussions in recent agricultural conventions. If our fruits are properly selected, carefully packed, and rapidly transported, there is no reason why large and permanent markets may not be opened all over Europe.

J. C. MONAGAN,
Consul.

CHEMNITZ, *August 31, 1898.*

GERMAN OBJECTIONS TO AMERICAN FRUIT.

My attention has recently been called to certain objections to the manner of preparing American fruits, especially apricots, for the German market, which have been made by the local authorities of the town of Neuwied in this consular district.

A large importer of American fruits in this city has received and disposed of over 100,000 marks' ($23,800) worth of American apricots alone during the past year. Until recently, this class of fruit has been exempt from the attention and criticism of German officials; but a few days ago this importer, with many others, was cited to appear before the local authorities of Neuwied for the purpose of a

discussion and explanation regarding the preparation of American apricots which were being sold there. This fruit had been received for the most part from New York City, Chicago, San Francisco, and San José. Many samples have recently been taken from the local dealers by the police officials of Neuwied for analyses. This has resulted in the discovery that these apricots had been treated in America with a preparation of sulphurous acid, which, it appears, is in direct violation of a statute of the German law.

Persons interested in the sale of American fruits here strongly desire to remove all reasons for these investigations, and have requested me, through the Department of State, to call the attention of the American shippers to this condition of affairs, and to the absolute necessity of abstaining from the use of sulphurous acid, or any such preparation, in the exportation of fruit to this market. A persistence in this practice will undoubtedly result in the entire exclusion of such fruits from Germany. Stricter attention must be given to the German laws. American dealers are still shipping to this market dried-apple slices which have been cured upon zinc frames. This process has been strongly condemned by the German Government, and the sale or handling of fruit thus prepared interdicted by law. These violations are suicidal in their effects, and damaging to the several branches of American trade.

It is the opinion of importers here that in some instances American pears are also treated with the sulphurous-acid process. It is of no consequence that competent medical authorities here have decided that fruit treated with sulphurous acid is not detrimental to health. It is sufficient for the watchful local official to know that the law forbids the sale of such fruit, and that his supreme duty consists in the strict enforcement of the law as he finds it upon the statute books.

American fruits are so far superior to other fruits found in this market that it would seem an easy matter for them to dominate the trade, without a resort to practices which tend to discredit them.

JOHN A. BARNES,
Consul.

COLOGNE, *August 9, 1898.*

AMERICAN COMMISSION HOUSES IN GERMANY.

There is a movement on foot to incorporate a company under the laws of Germany, which will be prepared to erect suitable buildings for the display and sale of American products, providing manufacturers and dealers in America show a disposition to aid and encourage such an enterprise. This proposed company will construct

buildings as desired by special interests, at an agreed rental, and will also be prepared to contract with the owners of merchandise to handle and sell their goods upon commission, and guarantee the payment of all bills of goods sold by them or their agents.

Germany appreciates our standing as a nation, and, I believe, would be willing to meet us halfway in a fair exchange of commodities. Would it not be well for a number of our manufacturers to send over a representative to make a thorough investigation of the field with a view to making arrangements with parties here for the housing and handling of their various products?

The city of Cologne, from its favorable location, would make an excellent distributing point for all kinds of merchandise. It is a city of nearly 350,000 people, with railway and steamship facilities unexcelled in Europe. Docks and wharves of solid masonry extend for miles along the river banks. There are four railroad depots, the central station being one of the finest in the world, built and equipped at a cost of about $8,500,000. The chief custom-house of the province is also located here. During the year 1897, there arrived at the harbor of Cologne 5,869 steamers, tow boats, and sailing vessels, carrying a total of 558,533 tons. There were shipped from this harbor during the same time 209,766 tons, in 4,765 vessels of all kinds. I am informed that the amount of goods and other merchandise received and shipped by railway in 1897 amounted to nearly 2,000,000 tons, and the value of the freight receipts aggregated $2,801,970.

JOHN A. BARNES,
Consul.

COLOGNE, *August 17, 1898.*

UNITED STATES TRADE WITH GREECE.

In view of the movement to secure a direct line of steamships from the United States to the eastern Mediterranean ports, the consul-general at Constantinople called upon United States consuls to send him reports of imports and exports shipped from or received at their respective ports. The report of the consular agent at Piræus, Mr. M. T. Sourmely, is so valuable that I send it to the Department.

There can not be the least doubt of the necessity of a direct line of steamships between the United States and Mediterranean ports. There is a wide field and large profits for a well managed line, and it should be an American one, flying the Stars and Stripes, if possible. Many of the stores of Athens—all those that keep imported articles—exhibit American goods for sale as English goods, they having been imported from England. Nearly every mail brings

letters of inquiry to this consulate from merchants and manufacturers of the United States, all anxious to find a market here for their products; for it is becoming generally known that Greece imports nearly all kinds of goods and machinery.

The English, German, and French transportation companies that call here are doing a very good business; but the Greek importers want a chance to get imports direct from America, and thus save the profits of the middlemen. Mr. Sourmely has been for many years an importer at Athens and Piræus, and thoroughly understands the subject; his report is therefore all the more valuable.

I also inclose a table showing the value of exports from Piræus to the United States, as invoiced at both Athens and Piræus, during the last four years.

DANIEL E. MCGINLEY,

ATHENS, *August 27, 1898.* *Consul.*

[Report from Piræus.]

The report requested on the prospects of an American steamship line or a direct line from America calling regularly at Piræus and other east Mediterranean ports can not possibly be done justice to with the very incomplete data available.

The books of this agency furnish information in regard to exports only. The record of invoices certified shows that the yearly total, which on June 30, 1895, had amounted to the value of only $19,000 for the Piræus district, rose to $111,000, viz, six times as much in the fiscal year ended June 30, 1896, thanks to more favorable circumstances and to facilities of transportation afforded by new indirect (transshipment) routes, organized by some of the Italian and French steamship companies. The war with Turkey naturally checked this remarkable development, and the total value of exports to the United States for the fiscal year ended June 30, 1897, amounted to only $68,000. The depressing effects of said war were intensified and most severely felt in this country during the fiscal year 1897–98, and these circumstances were further aggravated by the war between the United States and Spain; and yet the total value on June 30, 1898, reached $55,000, a fact which proves the strong tendency towards a steady increase of trade between this country and the United States—a tendency which will undoubtedly assert itself under favorable conditions.

The detailed record of the tonnage of exports kept in this agency's books for the fiscal year 1897–98 (as per extract attached) shows that by far the most important article in the Piræus district, with regard to export freight, was ore, viz: Manganese ore, 2,000 tons; natural magnesite (cliffstone), 1,700 tons; and iron, 600 tons—or 4,300 out of a grand total of 4,500 tons. On the other hand, sponges, the bulk (pressed) of which is proportionately very small, always hold the first place as regards value, and represented $31,000 out of a grand total of $55,000.

There is also a steadily growing exportation to the United States of Greek groceries and other produce, but it is checked by the difficulties and delays of transportation, arising mainly from the complicated transshipment system.

With regard to imports from the United States, the only article which can be traced in the records of this agency is petroleum, of which an average of 120,000 cases (1,200,000 gallons, or about 4,500 tons measurement) is annually imported

from Philadelphia into the Government depots at Piræus. There is no doubt, however, that other American articles and manufactures are imported indirectly into Piræus through Liverpool and London, and partly also through north continental ports, which far exceed in value the importation of petroleum and amount to a fairly important yearly tonnage.

Piræus is the chief Hellenic port for imports. Nearly 65 per cent of the goods imported into Greece pass through the Piræus custom-house. The transportation of these goods is effected by the weekly service of the following regular steamship lines (which enjoy, through conventions with the Greek Government, sundry privileges and reductions of port dues, etc.): 4 Italian steamers, 4 Austrian steamers, 2 French steamers, 2 German steamers, 2 Russian steamers, 2 Egyptian steamers, 1 English steamer (Johnston Line). The following give fortnightly service: 1 English steamer (Prince Line), 1 Dutch steamer, 1 Danish steamer. That is, there are about 74 regular arrivals from abroad monthly, besides the numerous irregular calls of steamers not belonging to lines trading constantly with the Piræus.

Greece imports all manufactured goods with the exception of twists Nos. 4 to 14, drills, T cloths, wines and spirits, soaps, etc., manufactured in the country, and a vast amount of produce. England sends all kinds of machinery, ironmongery, steel articles, chemicals, crystal, glass and earthen ware, groceries, coal, raw cotton (chiefly New Orleans), colonial produce of all sorts, potted and tinned goods, oils, paints and varnishes, stationery, cloth, watches, clocks, etc.; from Belgium come hides (chiefly of Buenos Ayres origin), skins, window glass, arms, bar and sheet iron, machinery, ironmongery, and hardware; from France come the renowned specialties of Paris and Lyons, machinery, ironmongery, cloth, and some colonial produce; from Germany and Austria come chemicals, stationery, machinery, hardware, and imitations of nearly all English and French articles and specialties; Italy sends sulphur and a limited amount of manufactured goods; from Russia come corn, dried fish, butter, caviar, and cattle; from Turkey and the Danube are imported corn and other agricultural produce; and from Egypt, raw cotton.

Most of these articles are produced or manufactured under favorable circumstances and at low cost in the United States, as is proven by the numerous American exports that come via London, Liverpool, etc., where the wholesale stores offer to Greek and Levantine merchants the advantage of quick execution of small orders, and also of liberal credit terms. It is therefore evident that an American steamship line, trading regularly between the United States and Greek ports, would immensely assist American manufacturers and producers in supplanting the middlemen and gradually opening important outlets in these markets. The English, German, and other steamship lines began with monthly (and by no means regular) voyages; but they soon organized regular weekly service at Piræus and other Levantine ports, and have found that it pays them well. The German line is now sending here two steamers per week. It may therefore be presumed that, with intelligent study, combined action, and perseverance on the part of American manufacturers and producers, assisted by a well-organized steamship line, the time will soon come when American articles will be freely imported into these important consuming markets, and the American maritime flag will secure its due share of the freights, both of the import and the export trade.

The steamers of the proposed line should probably in the beginning, on their way from America to the Levantine ports, call at Liverpool, London, and Antwerp for obtaining a share of the tonnage now monopolized by the German and English lines. It will naturally take some time for direct trade between America and the Greek and Levantine ports to develop. The steamers of the proposed line should also call at Alexandria, Smyrna, Constantinople, Danube, and Russian ports.

EXPORTS TO THE UNITED STATES.

Fiscal year ended June 30—	Value.
1895	$19, 160. 45
1896	111, 452. 22
1897	67, 954. 29
1898	55, 250. 18

Exports for the fiscal year ended June 30, 1898.

Articles.	Quantity.	Value.
	Tons.	
Books		$40.00
Brandy (Cognac)	0.8	200.93
Butter		14.47
Cheese	6.6	1,179.40
Cliffstone (natural magnesite)	1,700	6,236.40
Figs (dried)	7.19	476.00
Fire bricks (magnesite)	107.1	3,611.00
Fish (dried)	.5	39.00
Flowers (natural, dried)	.1	307.92
Iron ore (manganiferous)	600	1,439.00
Magnesite (burnt)	40	776.00
Manganese ore	2,000	7.892.00
Mastic brandy	.3	40.24
Oil (olive)	4.1	786.41
Olives	3.15	448.46
Pipes (tobacco)		20.00
Sponges	14.7	31,495.96
Soap	.9	48.00
Sardines	.1	12.77
Tarama (red caviar)	.13	64.00
Waters (mineral)	.14	33.25
Wine	.17	88.91
Total	4,487.18	55,250.18

Table showing the value of exports shipped from the port of Piræus, Greece, to the United States, as invoiced at Athens and Piræus.

Invoiced at—	Fiscal year ended June 30—				Total.
	1895.	1896.	1897.	1898.	
Athens	$4,176.20	$50,796.76	$3,013.85	$12,246.76	$70,233.57
Piræus	19,160.45	111,452.22	67,954.29	55,250.18	253,817.14
Total	23,336.65	162,248.98	70,968.14	67,496.94	324,050.71

FAULTS OF AMERICAN TRADE METHODS.

The jewelry and fancy-goods manufacturers of Great Britain make articles on a "forty-line scale," an arbitrary system of measurement, the origin of which is lost somewhere in an early period of the trade. In the measures for the common metals and articles a "line" is one-twelfth of an inch, but in the fancy trade a "line" is one-fortieth of an inch.

To-day, a declaration of "returned American goods" was sworn before me, meaning, of course, a big loss to an American manufacturer, and due to his failure to make the goods in accordance with the exact specifications of the order. A Birmingham manufacturer ordered from an American manufacturer a lot of "indestructible pearl," giving the measurements he required in "lines." Not knowing what "lines" meant to the fancy trade, the American, without making inquiry, had recourse to the metric system, and his goods are by this time on the way back to him.

Two weeks ago, $500 worth of fountain pens were sent back to a manufacturer in an interior American city. The Birmingham purchaser said: "They are without question better pens than I ordered, but they are not like the sample, and I am not in the business of educating the public to new things, but sell them what they want; and these goods go back." I know the town of the manufacturer very well, but do not remember his name, so assume that his factory is small and his capital limited enough for the return of goods amounting to $500 to hurt him; but he did not obey orders.

A few days ago, I was shown sixteen letters from sixteen firms, all well known in their line in America. On twelve of these letters there was insufficient postage; most had only a 2-cent stamp to carry them. This meant that the Birmingham man who wanted to buy from some of these American firms had to pay double the deficiency in postage, and his frame of mind and opinion of American business methods can be imagined. Steamer mails from the United States frequently arrive after business hours on Saturday, and if there is deficient postage, letters will not be delivered at hotels, etc., until Monday, and the traveling representative loses time waiting for home instructions much oftener than could be realized by anyone not aware how general is the failure of American firms to pay full postage. One American house tells its agent that a deficiency of postage is a guaranty that a letter will be delivered to the right party, as no one else would pay the postage penalty in order to get the letter.

If an English or a continental house sends a telegram, a letter always follows, even to points near by, containing a copy of the telegram. Very few United States houses do this, even with cablegrams, and a failure to deliver means loss of valuable time. If a letter is sent to a foreign point, a letterpress copy follows by the next steamer as certainly as the second of exchange follows the first.

Very few American houses are as systematic, and it is conceivable that a letter may be more valuable than a money draft.

With bills of lading, the European house does not depend on the triplicate copy forwarded by the shipping agent, but itself sends the duplicate copy to the consignee, retaining the original. Ameri-

can houses are constantly neglecting this, and American goods are constantly being held up in foreign custom-houses.

If a United States house wishes to be successful in foreign trade, it must place its business in the hands of some responsible member of the concern who will look after the details. It should not be merely an incidental part of the regular business tranactions.

MARSHAL HALSTEAD,

BIRMINGHAM, *August 15, 1898.* *Consul.*

TRAVELING AGENTS AND FOREIGN LANGUAGES.

Consul Warner writes from Leipsic, August 16, 1898, of the value of the knowledge of foreign languages in the foreign commercial business. He says:

Germany furnishes us, undoubtedly, with one of the best examples of real wide-awake and up-to-date methods in the struggle for commercial supremacy. Her efforts in China, Africa, and South America in this direction, within the past few years, have demonstrated most conclusively the great benefits to be derived from the possession of a thorough commercial knowledge of the languages of these countries. The first move a man makes in this country, who has an idea of entering the export or import business, is to acquaint himself with the language as well as the habits and wants of the people with whom he expects to have dealings.

Our commercial class, contrasted with that of Germany or Belgium, may be perhaps a trifle below the average. Commercial travelers from the countries named can read and speak the language of the people with whom they have relations, while many of ours are unable to make known their wants, much less carry on a business conversation. It can not be too strongly impressed upon the minds of those interested in commerce that the first thing to be learned is to be able to communicate in an intelligent way with prospective customers. This can only be accomplished by study and application. For a little exertion, we would be rewarded by a large increase in business and greater profits.

Let us look at the United States trade with Germany to-day. It is a fact that a large percentage of our imports to and exports from this country is carried on either by German citizens or German-born American citizens. Another thing, a great portion of this trade is transported in German bottoms. By a systematic training, the Germans are taught the value and necessity of the smallest details in connection with commercial life. The German merchants have studied our language, habits, and wants, and by their thrift and

perseverance and knowledge of business are able to control much of the shipping which goes on between the two countries.

While one can not say too much in commendation of the business men of the Empire of Germany, and of their methods in connection therewith, one may have earnest hope that our commercial men will take immediate steps toward seeing that young men who have an inclination to enter the mercantile world are afforded opportunities for securing the very best possible commercial educations. It will not be long before our business men will learn—if they do not know it now—that time and money will be wasted in sending agents to South America or other countries to solicit trade, who do not know the languages of the lands to which they are sent.

GERMANY'S EXPORT UNIONS.

England, France, and other continental countries can not help comparing Germany's giant strides in foreign commerce with their own. An English writer in the Bibliotheque Universelle says the Empire owes much to her wonderfully well directed export unions, and of these one of the very best is the Saxon Export Union, whose methods of doing business have served as a model for others. The yearly fee is 20 marks, a trifle less than $5, for which one gets the union's publications and a square meter of space at the union's annual exhibition in Dresden. Its agents are sent all over the world. They collect and send home samples, study goods, tastes, methods of transportation, systems of payment, credits, etc. Nor are these agents sent out without any definite aim, or simply to see what is going on. First of all, the territory is investigated. If necessary, agents will be sent to reconnoiter, so to speak. For such purposes 380,000 marks ($90,440) were expended between 1886 and 1895. The first trip was to Venezuela, Peru, Bolivia, and Chile; the next, to eastern Europe; the third covered Mexico, Canada, the West Indies, and Cuba; the fourth, Japan; the fifth, Africa.

All this is as true of other unions as it is of the Saxon. In Berlin, a number of unions work hand in hand with the Government to aid exports. Even the Central Union for Commercial Geography, a semiscientific institution, works to aid German exports. There are export banks and export journals; and, more important still, the colonial societies, which have agents in many of the world's leading cities. There is a union for international markets that holds two meetings annually. To the work of the unions must be added that of the Government in aid of Hamburg, Bremen, Kiel, Stettin, Lübeck, etc. Hamburg, alone, does more business in a year, to-day,

than did all the old Hanse towns in a like period of time. Only London, among European cities, surpasses Hamburg in the amount of its shipping.

The German agent is sui generis. If in Hamburg, he has huge houses full of samples. If a stranger comes to Hamburg, he finds not only what he wants at the commission merchants, but men able to explain to him in his own tongue and with astonishing fluency. The agent himself is often master of five, six, seven, or more languages. Boys born in Germany who have never been beyond the walls of Hamburg speak English, Spanish, French, etc. To this, as much as to any other factor, this Empire owes its wonderful success in recent years.

J. C. MONAGHAN,

CHEMNITZ, *August 30, 1898.* *Consul.*

A report has been received from Consular Agent Harris, of Eibenstock, dated September 2, 1898, covering the same information. Mr. Harris adds:

Germany's methods are certainly worthy of emulation. If American manufacturers expect to compete successfully in the world's markets, they must resort to the same means. Especially should manufacturers whose interests do not conflict combine and establish sample rooms in every city of commercial importance in Europe. Agents should be placed in charge of these sample rooms who not only understand the language thoroughly, but also the customs of the people and the institutions of the country. American manufacturers should choose for this purpose educated young men who will be wide-awake to grasp every legitimate opportunity. The same will apply to the commercial traveler as well.

GERMANY'S EXPORT TRADE.

Consular Agent Harris writes from Eibenstock, August 8, 1898:

The foreign commerce of Germany during the past four or five years has, in spite of many difficulties, been gradually increasing in extent. The new tariff laws of the United States, the confusion generally brought about by the war, the famine in India, and the financial crises in Brazil and Chile had led to the belief that the export trade must suffer a reverse. Such, however, has not been the case. Although the exports to the United States have fallen off, yet the increase with other countries has more than made good this difference.

The following table, which represents the value of the exports for the first half of each year mentioned, will give a definite idea of the extent of this increase:

Articles.	1898.	1897.	1896.	1895.	1894.
Silk goods	$17,136,000	$16,469,600	$18,159,400	$18,635,400	$17,635,800
Iron and iron manufactures	43,482,600	38,532,200	39,865,000	32,415,600	30,868,600
Leather goods	17,207,400	16,898,000	15,827,000	18,207,000	14,565,600
Drugs and chemicals	40,602,800	35,842,800	36,533,000	35,771,400	32,415,600
Instruments and machinery	22,657,600	20,468,000	17,255,000	16,826,600	14,613,200

There has also been an increase in the export of coal. A comparison of the first half of this year with that of 1897 shows a gain of 10,000,000 marks ($2,380,000).

Germany has reason to congratulate herself on the above showing, especially as the statistics of France and England show for the first half of this year a loss in the former country of 94,600,000 marks ($22,514,800), and in the latter country 98,000,000 marks ($23,324,000), as compared with the corresponding period of 1897.

Under date of August 16, 1898, Consul Monaghan, of Chemnitz, also notes the increase in the export trade of Germany. He says:

Although Germany's geographical situation will probably always preclude her from occupying England's position as a commercial state, she is already the second country in Europe in international trade. Her largest business transactions are with England, and they are constantly increasing.

GERMAN EXPORTS TO UNITED STATES.

Consul Warner, of Leipsic, writes, on August 11, 1898, that exports to the United States for the fiscal year ending June 30, 1898, show a decrease of $37,800,000 compared with those of the previous year. He continues:

The exports from Germany, as is well known, during the first half of the calendar year 1897, were exceptionally large; and when we consider that most of our warehouses were very heavily stocked at the beginning of the fiscal year 1897–98, it is hardly fair to draw a comparison between the years 1896–97 and 1897–98. Comparing the leading articles of German export to the United States for the first six months in each of the last three years, it will be seen that

there are seven articles which have been exported more largely in 1898 than they were in 1896, viz:

Articles.	1896.		1897.		1898.	
	D. cent.	*Pounds.*	*D. cent.*	*Pounds.*	*D. cent.*	*Pounds.*
Artificial flowers	576	125,001	821	180,998	1,505	331,792
Toys	25,154	5,545,450	37,371	8,238,811	28,580	6,300,747
Aniline colors	15,368	3,388,029	19,572	4,313,843	22,425	4,943,816
Leather gloves	809	178,352	1,071	236,113	1,048	231,042
Chloride of potassium	148,163	32,664,015	91,753	20,227,866	172,699	38,073,222
Fine leather goods	562	123,899	786	173,282	607	133,819
Cotton laces	980	216,051	1,578	347,886	1,107	244,049

Of the seven articles mentioned, there are three—artificial flowers, aniline colors, and chloride of potassium—which have been more largely shipped this year than they were in the corresponding months of 1897.

The exportation of the following articles seems to be gradually falling off:

Articles.	1896.		1897.		1898.	
	D. cent.	*Pounds.*	*D. cent.*	*Pounds.*	*D. cent.*	*Pounds.*
Pictures	3,661	807,104	3,097	682,765	2,732	602,297
Books	6,331	1,395,732	5,539	1,221,128	4,660	1,027,344
Colored paper	9,801	2,160,728	9,602	2,116,857	6,777	1,494,057

The next list of articles is the most important, and it will be observed that the decrease in every article is very large:

Articles.	1896.		1897.		1898.	
	D. cent.	*Pounds.*	*D. cent.*	*Pounds.*	*D. cent.*	*Pounds.*
Raw sugar	1,164,737	256,777,919	2,958,506	662,232,233	815,836	179,859,205
Half-silk goods	5,424	1,195,775	6,305	1,390,000	3,897	859,133
Cotton hosiery	23,573	5,196,904	29,857	6,582,274	18,844	4,154,348
Woolen goods	17,712	3,904,787	22,273	4,910,306	7,785	1,716,281
Woolen clothings	1,267	279,323	1,146	252,647	750	165,345
Woolen hosiery	1,866	411,378	2,385	525,797	687	151,456
Colored porcelain	36,882	8,131,006	45,395	10,007,782	32,508	7,166,714
Roman cement	1,042,876	229,912,443	1,027,965	226,625,164	991,163	218,511,775
Worsted goods	2,108	464,730	2,259	498,019	1,467	323,415
Wine in casks	21,469	4,733,056	30,598	6,745,635	17,389	3,833,579

Consul Pettit sends from Düsseldorf, August 6, 1898, translation of a clipping from the Kölniche Zeitung (Cologne) of even date, in which interesting comment is made on the export trade of Germany to the United States for the six months ending July 1. The article reads:

The statements of the extension of the foreign trade of Germany for the first half year of 1898 show a decline of our exports to the United States. While a part

of this is to be attributed to the uncertainty caused by the Spanish-American war, there can be no doubt that the principal reason must be sought in the new tariff law—the so-called Dingley tariff—which went into force on July 24 last year. The repeated protests of the Imperial Government against discrimination in the treatment of German sugar are as yet unanswered. This circumstance and the striking effects of the increased American tariff rates on German exports have lately prompted the recommendation of retaliatory measures by the German Empire against the United States. It is therefore interesting to hear that the Prussian chambers of commerce in the districts most concerned have made a general inquiry * as to the opinions and wishes of merchants with respect to the shaping of the commercial policy of the Empire with the United States. The result of this inquiry, which is without doubt of the utmost importance, is entirely unfavorable to the rash demands for a customs war with the United States. The chambers of commerce concerned had occasion to ascertain that, while the interested parties admit that a fighting tariff may be advisable and necessary under certain conditions, still the conviction prevails that it is in the interests of both countries to avoid a tariff war, which would be seriously detrimental to both, as is shown by our experience with Russia and Spain. It may be of minor importance that all of the importing houses are against a tariff war; but it is also true that a large majority of the exporting firms is likewise decidedly against any such measure. This will be easily understood, if we consider that, in spite of the increased rates, the export of numerous articles is still possible and remunerative, although the profits are very much reduced. A further increase of the American customs rates would simply cause the breaking off of all business relations, and probably the loss of the greater part of the American market to the German products. This market would be at once taken by Germany's principal competitors in America—England and France—and would only promote the development of many American industries in such a way that German competition would be entirely excluded for all future time. The present figures of the German exports to the United States are still a factor in our economic policies which can not be eliminated without great damage to the whole.

DECREASE OF FRENCH EXPORTS.

The French Bureau of Statistics of Commerce has recently published some interesting figures, showing the trend of foreign trade during the first six months of the current year, from which it has been found that there has been a notable increase in importations from foreign countries and a decrease in exportations—a loss of a part of the French market at home as well as of the foreign market which France formerly possessed.

The importations for the first half of 1898 reached 2,284,956,000 francs ($440,996,508), as against 1,930,716,000 francs ($372,628,188) for the first half of 1897 and 2,025,311,000 francs ($390,885,023) for the second half of the same year. During the same time, the exportations, which were 1,806,636,000 francs ($348,680,748) for the first half of 1897 and 1,791,312,000 francs ($345,723,216) for the second,

* This action was noted by Consul Monaghan in a report on "Adjustment of trade differences with Germany," *post* p. 473.

fell to 1,688,429,000 francs ($325,866,797). This is considered all the more serious because the fall in exportations touches so largely upon the manufactures of France. It is estimated that the imports of foreign manufactures aggregate not less than 70,000,000 francs ($13,510,000), which means 140,000,000 francs for the entire year. This might not be so disquieting were it not for the loss of the foreign markets which France had come to regard as her own. It is quite probable that, when a closer analysis of these figures is made, the French customs authorities will be able to determine just where the bulk of this volume of increased imports come from. An effort is now being made by customs officials to learn the origin of all importations into France. Quantities of goods come here in English and German bottoms ostensibly under the flag of the country of origin, but believed to hail from countries to which France looks for discrimination in her favor.

In commenting upon this unfavorable trade balance, a prominent French economic writer says:

We have bought a great deal abroad during the first six months of this year, and foreigners have diminished their purchases of us. This explains the exodus of our gold and silver. In the first six months of 1897, we parted with 121,634,000 francs ($23,475,362) of the precious metals; for the same period of 1898, we lost 267,075,000 francs ($51,545,475). Such a large movement has not been recorded for a long time.

JOHN K GOWDY,
Consul-General.

PARIS, *August 12, 1898.*

SAMPLE BUREAU IN STUTTGART.

Consul Ozmun, on August 4, forwarded a translation of the last annual report of the Stuttgart Musterlager, or sample office. This is a German association whose object is the further extension of Germany's trade with foreign markets. The following is the translation, in part:

The unfavorable condition of business in various countries to which Germany exports, and to which we referred in our last year's report, has not improved in the year 1897, and has, as a consequence, reduced the number of orders as well as the amount of sales. The continued sinking of the Brazilian currency was especially felt; many of our best customers were compelled to reduce their purchases to the utmost, and have ordered only supplies which are the most needed.

The trade with India, which was developing well in past years, has suffered from the plague, especially in watches, jewelry, and articles of luxury. We expect, however, a considerable increase of demand upon the disappearance of the plague.

The visits to the sample rooms were about the same as in former years; the purchasers ordered principally novelties, and bought, as far as South and Central American markets were concerned, the old staple articles only in small quantities.

The number of articles hereinafter mentioned as ordered through us gives an

idea of the variety of our exhibition, and shows that by our connections with the best German manufacturers we are in a position to inform visitors about German industries and to place their written orders with the best and most efficient manufacturers.

The number of purchasers through this office for the three years last past were: In 1895, 333; in 1896, 371; in 1897, 358.

Orders were received—

Year.	In the sample rooms and by correspondence.	Through agents.	Through Hamburg agency.	Total.
1895	1,675	49	564	2,288
1896	1,740	34	659	2,433
1897	1,547	51	730	2,328

The orders received were divided among 439 manufacturers from Wurttemberg and elsewhere.

The year 1897 brought no losses whatever to our members. All sales made through us were promptly consummated.

Orders were received last year from the principal cities of both hemispheres, even including such remote centers as Hongkong, Bombay, Colombo, Sidney, Melbourne, and Johannesburg. The following is a partial list of articles ordered at the sample rooms, personally or by correspondence: Chemicals and pharmaceutical preparations, medicinal wines, sparkling and still wines, beer, oilcloths, corks, chocolate, candies, sugar, dried vegetables, gelatin, cigars, hops, sausages, perfumeries, stoneware, porcelain and glassware, meerschaum and amber articles, sandstones, steel and barbed wire, houshold machines of all kinds, water filters, pumps, printing presses, canvas shoes, gloves, india-rubber goods, tin foil; iron, tin, copper, aluminium, wire, metal, nickel, and silver-plated ware; mathematical instruments, thermometers, optical instruments, iron furniture, iron safes, silverware, clocks, watches; ivory, bone, and jet ware; bicycles, sewing cotton and silk, worsteds, knitting yarn, ribbons, laces, men's furnishings, linen, felt, cotton and woolen goods, pianos and musical instruments of all kinds, and a great number of other commodities.

The number of catalogues now issued is 9,575. Our director last year visited Hamburg, Bremen, Berlin, Leipsic, Frankfort, and other places of industry in the country.

In the month of May last, on an invitation of the Philadelphia Museums, our director visited the United States to attend the inauguration of this museum. These festivities were followed by a trip to the most important places of industry in the United States, where he had an opportunity to get acquainted with all the most important branches of industry of that country. In forty-nine days the cities of Philadelphia, Baltimore, Washington, New York, Fall River, Boston, Lynn, Providence, Worcester, Springfield, New Haven, Pittsburg, Dayton, Cincinnati, Nashville, St. Louis, Chicago, Milwaukee, Grand Rapids, Detroit, Cleveland, and Niagara Falls were visited. At the end of this trip our director remained for eight days more in New York to visit old customers and find new ones; but the time from July 20 to 27, immediately before the signing of the new tariff, was very unfavorable for forming new business connections.

The sales through our representatives in foreign countries were about the same as in the previous year. Even our agent in Athens had but a small decline in sales, notwithstanding the war.

The Hamburg agency had an increase, as well in the number of orders as in

the amount of sales; especially satisfactory were the sales of machines, silver and nickel-plated wares, jewelry, watches, clocks, musical instruments, optical instruments, and leather wares.

If we were obliged to report at the beginning a decrease in the number of orders for the year 1897, we are glad to be able to say in closing our report that circumstances are improving this year. Since the beginning of the year business is much livelier. The number of orders is so far larger than that of last year that, if no retrogression occurs, we may hope that the year 1898 will give satisfactory results to our members.

GERMAN TRADE WITH RUSSIA.

Germany's trade with Russia is increasing. The Central Organization for Trade Treaties, of Berlin, has just published a report on Russia's trade in 1897. Its salient points are significant. The imports amounted, in round numbers, to $262,242,440; the exports, to $363,143,732. Compared with 1896, there was a falling off in imports of $16,374,400, or about 6 per cent; an increase in exports of $15,374,400, or about 5 per cent. The exports consisted of foods to the amount of 413,478,000 rubles, or a trifle more than $206,739,000; raw materials and half-manufactured articles, $127,253,000; manufactured articles, $9,573,000; live animals, $8,546,000. Compared with the figures for 1896, we find a decrease in raw materials of 1 per cent, and an increase in manufactured articles of 48 per cent; in foods, of 8 per cent; and in live animals, 12 per cent. The imports of raw materials gained 7 per cent; of manufactured articles, 1 per cent; of foods, 8 per cent; and of living animals, 30 per cent.

If we examine Russia's statistics in regard to the lands to which she exported, we find a large gain in her shipments to Roumania, Belgium, and Austria-Hungary, and a moderate increase in those to France, Holland, China, Egypt, and British India. Exports to Italy, Turkey, Germany, and England fell off, in the case of the last two, because of a decrease in the purchases of sugar and cereals. Exports of refined sugar fell off 50 per cent in quantity and 60 per cent in value. There was also a diminution in mineral oils (because of America's boundless supplies and power to put down all competition), in fibers, and in wheat, rye, and hemp. Exports of oil cakes, barley, and maize went up, the last 60 per cent. The exports of woods for building and other useful purposes increased 25 per cent. Most of this went to England. Exports in wools, manganese ores, skins, hides, butter, eggs, etc., increased.

Of the imports, Germany supplied $95,000,000 in 1896, against $90,000,000 in 1897; England, $55,500,000 in 1896, $51,000,000 in 1897; the United States, $33,000,000 in 1896, and $12,000,000 in 1897. Expressed in percentages, Germany participated in the Empire's imports 32.2 per cent; in the exports, 24 per cent. England's share

in the Empire's imports was 18.6 per cent; in the exports, 21.4 per cent. The increase of German trade in Russia over that of England and the United States is explicable only on the basis of better organized efforts. German agents are in Moscow, St. Petersburg, Nizhni Novgorod, and Odessa. A list of English, American, and German agents in Russia would make interesting reading. For one English or American agent who can read, write, or speak Russian, fifty Germans can do it.

J. C. MONAGHAN,
Consul.

CHEMNITZ, *August 30, 1898.*

COMMERCIAL EDUCATION AT GERA.

Consul Warner sends the following from Leipsic, July 28, 1898:

Subsequent to writing my report upon the Leipsic Commercial High School,* my attention was called to another very prominent technical institution.

The Amthor Higher Commercial School at Gera, Reuss, affords young men a most excellent opportunity for acquiring theoretical and practical knowledge of business and business methods. There are now 200 students, and the course of instruction is as follows:

The preparatory course comprises German, French, and English, with correspondence; history and geography (general and commercial), botany and zoology, and caligraphy and arithmetic.

The first commercial course embraces: German language, literature, and correspondence; French and English languages, and correspondence; arithmetic, bookkeeping, commercial science, history and geography (general and commercial), higher mathematics, physics, caligraphy, and stenography.

The second and third courses take up the same subjects in a more advanced form. The length of each course is one year.

In response to a long-felt want, a class has been added to the school course which affords apprentices of the mercantile calling an opportunity to perfect themselves in a theoretical way

---

WEAVING SCHOOL.

Under date of August 3, Mr. Warner transmits the following report from Consular Agent Neuer, of Gera:

Continually increased attention is given in Germany to the question of technical and industrial education. The Government as well as mercantile corporations and municipalities are aiding this move-

*See CONSULAR REPORTS No. 214 (July, 1898), p. 397.

ment in every possible way. Schools are to be found in nearly every large trade center, where the details entering into the manufacture of various classes of goods are taught, and the latest discoveries of science and practical experience are employed. Of this widely spread system of technical and industrial education, the weaving school in Gera forms a branch. Wealthy manufacturers take a deep interest in the institute and have aided it from time to time by donations and bequests. Moreover, the institute is supported by subscriptions, the fees of the students, and an annuity of 2,000 marks ($476) granted by the Government. It has a principal and seven assistant teachers, who possess special qualifications and are skillful weavers themselves. The board of administration consists of five expert merchants, who watch over the school's progress, examine its work, and report to the city's association of manufacturers.

The pupils are partly young workmen and partly young merchants engaged in weaving mills, and are divided into four classes. The school is open twice a week; on Sundays from 7 or 8 to half-past 9 or 10 o'clock in the morning, and on Tuesdays or Thursdays from 8 to 9 o'clock in the evening, thus not interfering with the usual working hours of the students.

The course of study lasts four years, and instruction in the single classes comprises the following subjects:

Class 1.—Calculation and pattern designing; origin and development of weaving; mode of sorting and classifying the raw material; method of rating goods by ascertaining the quantity and price of material used, and also cost of labor required in the production of a given length and width of goods, or from given data of values of material and labor.

Class 2.—Weaving in its present state of perfection; weaving and designing of jacquards; nature and properties of the various kinds of wool.

Class 3.—Machine construction, with special regard to the power loom; comparative merits of power looms; consideration of the principal parts which are common to all power looms.

Class 4.—Construction of various kinds of hand looms; weaving by hand looms; technical designing; weaving of fancy articles, etc.

Theoretical instruction is given from various works on weaving, and from a large collection of designs and models. For practical instruction, there are in use 13 power and 17 hand looms adapted to the weaving of various standard fabrics, besides other appliances for demonstrating the processes of preparation and of plain and fancy weaving.

A voluminous library connected with the school proves a most valuable factor in the promotion of technical knowledge.

An exhibition embracing woven articles, sketches, designs, and

writings of the pupils on textiles, machine construction, etc., is held every year. The last exhibition, on March 27 of this year, was considered an extraordinary success, and showed the great interest taken by all classes of people in the institution.

On the other hand, it made evident the diligence and zeal which both teachers and scholars devote to their task in pursuance of one common object—the advancement of industrial and technical knowledge. Prizes were awarded on this occasion, consisting of books on designing and weaving, cases of mathematical instruments, diplomas, etc.

The fee to be paid monthly by each pupil amounts to only 50 pfennigs (12½ cents), hence enabling the working classes to share the benefits of the training.

I need not take up space in this report to call the attention of our manufacturers to the advantages derived from technical education, as these are already known and appreciated by many of our educators and manufacturers. My present purpose is simply to call attention to the means that are being applied to generalize and perfect the system of technical education in this country, in order that our people may be advised of the methods adopted to strengthen manufacturing industries.

OPENINGS IN SOUTH AFRICA.

I have the honor to submit certain information for the benefit of the manufacturers of the United States.

BICYCLES.

The Chartered Company of Rhodesia are contemplating the formation of a bicycle corps.

ELECTRICAL MACHINERY.

East London seeks tenders for electric lighting and street-car system.

Durban desires estimates for an electric street railway.

Delagoa Bay is contemplating the lighting of the bay by electricity.

The harbor board of Cape Town talk of using movable electric cranes, consisting of engine, cranes, and locomotives.

GAS.

Cape Town is discussing the advisability of using automatic gas meters.

England has been receiving orders from South Africa for agricultural machinery, blowers, cranes, bicycles, electrical plants, engines, flour-mill machinery, pumping machinery, furniture, rifles, mining

machinery, railway material, telegraph and telephone material, road rollers, tile and pipe making plants, water drills, etc.

There has been a considerable falling off in the value of goods shipped to Natal during the first quarter of 1898 from all the principal exporting countries.

J. G. STOWE,
Consul-General.

CAPE TOWN, *July 25, 1898.*

GOVERNMENT SUPPLIES FOR CAPE COLONY.

Consul-General Stowe sends from Cape Town, July 22, 1898, the result of certain "tenders" for government supplies, which show the prices paid by the government of the colony.

Articles.	Price.		
	£ s. d.	£ s. d.	
Adzes with handles, complete....each...		0 4 9	$1.15
Anvils....per 100 pounds...		1 8 0	6.81
Augers, screw....each...	0 1 0 to	0 2 9	$0.24 to .66
Awls, brad, with handles....per dozen...		0 2 0	.48
Axes....do....	1 7 0 to	3 0 0	6.56 to 14.60
Bags, grain and leather....each...	0 0 5 to	1 15 0	.10 to 8.51
Barrows....do....	1 5 0 to	1 11 6	5.98 to 7.66
Bars, crow....per pound...	0 0 3 to	0 0 9½	.06 to .19
Bells, electric....each...	0 5 8 to	0 13 0	1.21 to 3.16
Belting, leather....per running foot...	0 0 11 to	0 1 8	.22 to .40
Blocks, pulley....per inch...	0 0 6 to	0 3 0	.12 to .73
Bolts and nuts....per pound...	0 0 2¼ to	0 0 3	.04 to .06
Borax....do....		0 0 4¼	.08
Braces....each...	0 1 2 to	0 16 0	.29 to 3.89
Brackets....per dozen...	0 3 0 to	0 4 3	.73 to 1.03
Brads, flooring....per 100 pounds...		0 10 6	2.55
Brass (rod, sheet, and tube)....per pound...	0 0 9½ to	0 0 11	.19 to .22
Bricks, C. I. air....per dozen...	0 3 6 to	0 5 6	.85 to 1.33
Brooms, bass, long-handled....each...	0 1 10 to	0 2 9	.44 to .66
Brushes....do....	0 0 2 to	0 3 6	.04 to .85
Buckets....per dozen...	0 0 4 to	0 1 10	.08 to .44
Candles....per packet...	0 0 5 to	0 0 7¼	.10 to .14
Cans....each...	0 3 0 to	0 5 6	.73 to 1.33
Canvas:			
Flax....per yard...	0 1 4½ to	0 1 7	.33 to .38
Cotton....do....	0 1 6½ to	0 1 9	.37 to .42
Casement window....each...	1 3 0 to	1 6 0	5.59 to 6.32
Casks, wine (according to capacity)....do....	0 5 0 to	1 1 0	1.21 to 5.11
Cells, Leclanche (large size)....per dozen...		1 14 0	8.27
Cells, Leclanche, boxes....each...	0 4 6 to	0 6 6	1.09 to 1.46
Cement, Portland....per barrel...	0 11 3 to	0 15 0	2.73 to 3.64
Chain, iron (short links)....per 100 pounds...	0 14 6 to	0 17 9	3.53 to 4.31
Chisels....each...	0 0 6 to	0 2 0	.12 to .48
Clocks....do....		3 0 0	14.60
Coals, smiths'....per 2,000 pounds...		0 2 0	.48
Copper, sheets....per pound...		0 0 10	.20
Detonators....each...	0 3 0 to	0 4 3	.73 to 1.03
Doors, American (according to size)....each...	0 10 0 to	0 17 0	2.43 to 4.13
Driers, patent....per pound...		0 0 2	.04
Drills, steel (octagon and twist)....each...	0 0 4¾ to	0 4 0	.09 to .97
Dynamite....per case of 50 pounds...	3 5 0 to	4 7 6	15.81 to 21.29

Articles.	Price.									
	£	s.	d.		£	s.	d.			
Feeders, oil.....each...					0	1	6			$0.36
Fenders, ship (cork).....					0	14	0			3.40
Files.....per dozen...	0	2	6	to	1	4	0	$0.60	to	5.84
Filters, glazed earthenware and Pasteur.....each...	0	10	6	to	4	10	0	2.55	to	21.89
Forges, portable.....do.....	3	11	0	to	6	15	0	17.27	to	32.84
Forks, digging.....do.....	0	4	6	to	0	5	3	1.09	to	1.27
Fuse, safety.....per 100 coils...	0	2	0	to	3	15	0	.48	to	18.24
Gimlets.....per dozen...					0	2	9			.63
Glass, window (common).....per box of 50 feet...					0	7	0			1.70
Glue.....per pound...					0	0	5			.10
Grease, antifriction.....per 100 pounds...	0	8	2	to	0	8	4	1.98	to	2.02
Grindstones.....each...	0	6	6	to	1	1	0	1.58	to	5.11
Gunpowder, blasting.....per pound...	0	0	10	to	0	1	1	.20	to	.26
Guttering.....per running foot...	0	0	3	to	0	0	5½	.06	to	.11
Hammers.....each...	0	0	4	to	0	2	8	.08	to	.64
Handles.....per dozen...	0	3	4	to	0	9	0	.81	to	2.19
Harness, alum leather.....per set...	3	10	0	to	8	0	0	17.03	to	38.93
Harrows.....each...	2	10	0	to	5	0	0	12.16	to	24.33
Hasps and staples.....per dozen...					0	2	0			.48
Heads, galvanized spout.....each...	0	2	6	to	0	2	10	.60	to	.68
Hinges.....per pair...	0	0	2	to	0	5	9	.04	to	1.39
Hoes.....each...	0	0	10	to	0	1	9	.20	to	.42
Hooks.....do.....	0	0	6	to	0	2	6	.12	to	.60
Hose, india rubber (imbedded).....per running foot...					0	0	10			.20
Indicator, Bell.....fig...					0	5	0			1.21
Iron:										
Galvanized (corrugated).....per 100 pounds...	0	11	3	to	0	13	6	2.73	to	3.28
Galvanized (plain).....do.....	0	15	0	to	0	16	0	3.65	to	3.89
Rod.....do.....	0	8	0	to	0	10	6	1.94	to	2.55
Jacks.....each...	0	11	0	to	10	0	0	2.67	to	48.66
Junctions.....do.....	0	0	4	to	0	6	0	.08	to	1.46
Junk.....per pound...	0	0	5	to	0	6	0	.10	to	1.46
Knives, drawing and pruning.....each...	0	1	3	to	0	2	3	.30	to	.54
Lamps.....do.....	0	3	0	to	0	12	6	.73	to	3.04
Lead, sheet.....per 100 pounds...	0	16	0	to	1	4	0	3.89	to	5.85
Leggings, lineman's.....per pair...					1	3	0			5.59
Levels, spirit (mason's).....each...	0	2	0	to	0	5	6	.48	to	1.33
Lines, garden, road, and metallic.....do.....	0	0	8	to	0	11	0	.16	to	2.67
Locks, patent.....do.....	0	2	3	to	0	12	6	.54	to	3.04
Mops and handles, best thrum.....do.....					0	3	0			.73
Nails:										
American cut.....up to 100 pounds...	0	0	2	to	0	12	0	.04	to	2.92
English cut.....do.....	0	0	2	to	0	12	0	.04	to	2.92
French wire.....per pound...					0	0	1⅞			.03
Rose patent, pressed.....up to 100 pounds...	0	0	2	to	0	13	6	.04	to	3.28
Needles, sail.....per dozen...					0	0	4			.08
Oakum.....per pound...					0	0	4			.08
Oil, lard and linseed (raw and boiled).....per gallon...	0	2	8	to	0	5	0	.64	to	1.21
Packing, asbestos, millboard.....per pound...	0	0	10	to	0	1	3	.20	to	.30
Paint.....per cwt...	2	1	0	to	2	9	0	9.97	to	11.92
Picks.....each...	0	4	4	to	1	13	0	1.05	to	8.02
Pipes, rain (galvanized iron).....per foot...	0	0	1¼	to	0	1	4	.02	to	.32
Piping:										
Earthenware (glazed drain).....do.....	0	0	4½	to	0	1	4	.09	to	.32
Lead.....per 100 pounds...					0	18	6			4.50
Pitch, Stockholm.....do.....					0	13	0			3.16
Planes.....each...	0	2	3	to	0	6	0	.54	to	1.45
Plows, double furrow and hillside.....do.....	2	10	0	to	15	0	0	12.17	to	72.99
Pouches, messengers'.....per dozen...					1	16	0			8.75
Punches, eyelet.....each...					0	3	3			.79
Pulverizers, disc.....do.....					14	10	0			70.56

Articles.	Price.		
	£ s. d.	£ s. d.	
Pushes.....per dozen...		0 15 0	$3.64
Rakes, garden (with handle).....each...	0 1 3 to	0 2 9	$0.30 to .66
Ridging, galvanized iron.....per foot...	0 0 3¾ to	0 0 7	.06 to .14
Rope.....per 100 pounds...	2 5 0 to	2 18 4	10.95 to 14.19
Saws.....each...	0 2 2 to	0 15 6	.52 to 3.76
Scales, parcel, with weights.....do.....		1 4 0	5.84
Scissors, pruning.....per dozen...		1 3 0	5.59
Screw-driver (6 inch to 18 inch).....each...	0 0 6 to	0 2 0	.12 to .48
Screws:			
Brass for wood, (½ inch to 3 inch).....per gross...	0 1 0 to	0 10 6	.24 to 2.55
Iron, for wood.....do.....	0 0 4 to	0 2 9	.08 to .66
Shoes, galvanized, spout.....each...	0 1 2 to	0 1 4	.28 to .32
Shovels.....per dozen...	1 2 6 to	1 8 0	5.47 to 6.81
Sickles.....do.....		0 7 0	1.69
Sieves (20 inches in diameter), double cased.....do.....	0 3 6 to	0 4 0	.85 to .97
Slashers, American.....		0 5 6	1.33
Soap.....per box of 7 pounds...		0 3 10	.93
Spades.....per dozen...	1 10 0 to	1 11 9	7.30 to 7.72
Spanners.....each...	0 2 0 to	0 8 0	.48 to 1.94
Spikes.....per 100 pounds...	0 13 0 to	0 14 6	3.16 to 3.52
Squares, carpenters'.....each...	0 1 0 to	0 2 3	.24 to .54
Standards, fencing.....do.....	0 1 3 to	0 1 8	.30 to .40
Staples.....per gross...	0 0 5 to	0 0 8	.10 to .16
Steel.....per 100 pounds...	1 6 0 to	1 15 0	6.32 to 8.51
Stocks and dies, engineers'.....per set...	1 4 0 to	2 2 0	5.85 to 10.22
Stones, oil, in cases.....each...		0 2 6	.60
Strainers.....do.....	0 1 2 to	0 3 0	.29 to .73
Switches.....do.....	0 7 0 to	0 10 0	1.69 to 2.43
Tallow, Russian.....per pound...		0 0 6	.12
Tanks (200 to 400 gallons).....each...	2 5 0 to	6 14 6	10.94 to 32.72
Tar, coal.....per gallon...	0 1 0 to	0 1 6	.24 to .36
Teeth, harrow.....each...		0 0 7	.14
Timber, pitch pine.....per cubic foot...	0 2 9 to	0 3 0	.66 to .73
Tongs, pipe (No. 2 to No. 4).....each...	0 8 0 to	0 16 0	1.94 to 3.89
Trowels.....do.....	0 0 9 to	0 1 9	.18 to .42
Turpentine (in 8-gallon cases).....per gallon...	0 2 11½ to	0 3 6	.71 to .85
Twine, sail.....per hank...		0 0 7½	.15
Varnish.....per gallon...	0 7 0 to	0 13 0	1.69 to 3.16
Vises.....per pound...	0 0 4½ to	0 0 5	.09 to .10
Washers, galvanized.....per gross...		0 0 5	.10
Waste cotton.....per pound...		0 0 4½	.09
Wax, shoemakers'.....do.....		0 0 8	.16
Wedges, steel (various sizes).....do.....		0 0 4	.08
Wheelbarrows, cast steel.....each...		0 5 0	1.21
Windows, American (complete with weights).....do.....	1 2 0 to	2 10 0	5.35 to 12.16
Wire.....per yard by the 100 pounds...	0 0 0¾ to	0 0 11	.01 to .22
Fencing.....do.....	0 10 0 to	0 11 6	2.43 to 2.79

The following firms competed:

De Wall & Co., in adzes, blocks, bolts and nuts, cans, drills, filters, forges, forks, hammers, hoes, picks, screws, sieves, spanners, staples, trowels, turpentine, and varnish.

R. M. Ross & Co., in anvils, augers, belting, bolts and nuts, borax, braces, brackets, brass (rod), bricks, cement, chain, chisels, drills, files, filters, gimlets, hammers, handles, harrows, hinges, hoes, hooks, iron (sheet and rod), jacks, junctions, knives, levels, nails, paints, picks, pipes, plows (ridging), saws, scissors, shovels, sickles,

sieves, spanners, squares, standards, staples, steel, harrow teeth, tongs, vises, wedges, and wire.

J. Robertson & Co., in awls, bells (electric), bolts and nuts, braces, brass, tube, brushes, cement, chisels, copper (sheet), drills, files, forges, harrows, hooks, iron (corrugated), junctions, knives, locks, French wire nails, needles, netting, lard oil, piping, planes, rakes, saws, screws, sieves, slashers, staples, whiting, and wire.

Geo. Findlay & Co., in axes, barrows, bars, braces, brads, brooms, buckets, cells, drills, filters, grindstones, guttering, hammers, handles, harrows, hinges, hooks, indicator, iron (rod), levels, locks, nails, packing, picks, pipes, piping, pitch, planes, plows, punches, pushes, rakes, saws, scales, screw-drivers, screws, shoes, shovels, spades, spanners, spikes, squares, stocks and dies, switches, tar, trowels, varnish, and wire.

A. Cameron & Co., in brushes, canvas, fenders, mops and handles, rope, and blocks.

J. Flower & Son, in bars, brushes, buckets, candles, driers, feeders, forges, guttering, hammers, heads, jacks, junk, lead (sheet), lines, nails, oakum, pipes, ridging, screws, spanners, steel, tallow, tanks, and tar.

CAPE COLONY'S IMPORTS AND EXPORTS.

Consul-General Stowe sends the following, dated Cape Town, July 23, 1898:

For the twelve months ended June 30, Cape Colony imported goods to the value of £16,988,088 ($82,672,530), and exported goods to the value of £23,652,822 ($115,106,458). From the imports, there should be deducted the goods entered for consumption in the Orange Free State, the value of which is not given; and goods entered at the custom-house for removal to states outside the union, the value returned being £4,014,500 ($19,536,564). Even with these reductions, the total imports for Cape Colony are high, as compared with former years.

The exports of colonial produce proper were £4,092,335 ($19,915,348); of diamonds, £4,514,061 ($22,467,678); of gold (from the Transvaal), £13,306,179 ($64,754,520). This last represents more than half of the total exports. It is also stated that the Transvaal does not get the £13,000,000 back again in goods, the difference representing the remittances of gold dividends to stockholders outside the country.

Imports, as compared with the corresponding period last year, fell off £1,331,603 ($6,480,246). Exports increased for same period £4,384,647 ($21,337,885), the gain being in gold. Exports of strictly

colonial (Cape) produce increased £326,585 ($1,589,326). In the twelve months ended June 30, 1897, the export of specie was £1,057,306 ($5,145,380), and in the twelve months ended June 30, 1898, £1,461,803 ($7,113,864). This is looked upon as a drain of specie, and is considered a bad sign.

The goods in bond in Cape Colony on the 30th day of June, 1898, were as follows:

Articles.	Quantity.	Articles.	Quantity.
Ale and beer.....gallons...	132,604	Oil:	
Butter.....pounds...	378,055	Mineral.....gallons...	208,062
Candles.....do.....	583,557	Lard.....do.....	21,319
Cheese.....do.....	60,023	Timber.....cubic feet...	2,433,192
Dynamite.....do.....	896,467	Tobacco:	
Flour.....do.....	4,668,144	Cigars.....number...	2,554,365
Lard.....do.....	155,404	Manufactured.....pounds...	95,875
Soap.....do.....	1,158,343	Wheat.....do.....	22,286,243

ROOFING SLATES.

In answer to a New York correspondent,* Consul-General Stowe writes on August 10, 1898, that no roofing slates are imported into South Africa from the United States, although more than a million were imported last year from the United Kingdom, and thirty-two odd thousand from Belgium, the demand for them being on the increase. He gives it as his opinion that they are inferior in quality to many of those used in the United States.

TOBACCO.

In reply to a letter from a tobacco firm in Virginia, the Consul-General, under date of August 13, 1898, writes:*

No record has been kept, since 1892, of the tobacco manufactured in South Africa. In that year, 677,222 pounds of smoking and chewing tobacco and snuff were manufactured, and 4,854,500 cigars.

In 1895–96, the Government of Cape Colony spent $7,610 to assist in the production of tobacco.

The total exports of tobacco for 1897 were valued at $37,540. Less than $200 worth was unmanufactured.

The tobacco raised in South Africa is not of such flavor as to please American and English and perhaps German smokers.

The total value of imports for 1897 were: Manufactured, $354,631.82; unmanufactured, $60,979.86. In addition to this, cigars

* Letter mailed to correspondent September 19, 1898.

and cigarettes were imported from all countries to the number of 106,824,556. The United States furnished 59,282,065, principally cigarettes. A large number of Mexican cigars is imported through English houses.

Large quantities of Transvaal and colonial grown tobacco are consumed yearly. The manufactured tobacco is protected by a duty of $1.46 per pound, to which is added the further duty of 9 per cent ad valorem on cigars and 97 cents per pound on cigarettes. The duty on raw material is:

		Cents.
Manufactured and cut	per pound	85
Manufactured but uncut	do	73
Not manufactured but stemmed	do	60
Not manufactured and unstemmed leaf	do	48

FREIGHT RATES.

Consul-General Stowe sends from Cape Town, July 22, the following recommendations made by the South African Merchants' Committee upon the subject of freight rates to South Africa:

(1) That in view of the severe competition owing to the reduction in rates of freight from America to South Africa, which of necessity should tend to a reduction in rates of freight from the United Kingdom to South Africa, the urgency of a supply of cargo steamers from the United Kingdom to South Africa of a much less expensive class than the present intermediate steamers, at lower rates for sea freight, is such that the committee press on the steam lines the necessity of some arrangement being immediately made with a view to supplying this urgent want.

(2*a*) That the steam lines having on April 14 advised the Merchants' Committee that arrangements had been made with the German-Australian line in respect of Cape Colony ports similar to that existing with the German-East African line with respect to the ports of Natal and Delagoa Bay, the committee assumes that shipments by the German-Australian line will not prejudice the claims of merchants to commission on their shipments made from the United Kingdom or the Continent; (2*b*) that a quantity of cargo was booked and presumably carried in the *Meissen*, sailing from Hamburg on the 22d of January and from Antwerp on the 29th, at the low rate of 5s. per ton; (2*c*) that contracts had been made by the German-Australian line extending over three years at the very least, one contract with the option of the same being prolonged for four years; (2*d*) that arrangements had subsequently been made between the steam lines and the German-Australian line; (2*e*) and that therefore, by virtue of the compact of March 9, 1893, the committee calls upon the steam lines to refund to those to whom the same may be due such differences in the rates of freight or such remuneration as may have been paid, in order to arrive at the same arrangement as that between the steam lines and the German-Australian lines.

(3) That the steam lines be asked whether an arrangement had been made with the French lines of steamers; and if so, whether the same is similar to that with the German-East African line and for the German-Australian line, in relation to shipments of goods by the French line of steamers both outward and homeward.

SHIPPING OF AMERICAN FREIGHT.

Under date of July 30, 1898, Consul-General Stowe, of Cape Town, says:

The following statement shows the number and tonnage of steam and sailing vessels, which freighted goods from the United States to ports in South Africa for the year ended December 31, 1897.

Nationality.	Number.	Tonnage.
English vessels:		
Sailing	38	45,939
Steam	36	117,339
Other foreign vessels:		
Sailing	29	26,586
Steam	8	17,544
Total	111	206,449

The tonnage shown is the "registered tonnage" and not the weight of the cargo, which far exceeds the registered tonnage, perhaps by as much as 50 per cent.

During the year 1897 American vessels entered the ports of South Africa as follows, some of which only touched at these ports for supplies:

Class.	Number.	Tonnage.
Sail	21	14,498
Steam	1	1,378
Total	22	15,876

Here again the "registered tonnage" and the weight of cargo must be taken into consideration.

From the Pacific ports of the United States alone, the following vessels entered the ports of South Africa, principally with cargoes of wheat:

Nationality.	Number.	Tonnage.
English	21	33,652
Foreign	6	8,477
American	1	1,378
Total	28	43,507

From the ports of the United States, wheat alone was imported into South African ports to the amount of 186,237,801 pounds, of which 126,948,995 pounds came from the Pacific ports and around Cape Horn. I speak of this merely to show what the foreign market of this country—constantly increasing—is worth to the farmers of the United States, and the value of a merchant marine to our manufacturers and producers. These figures show that nearly all the freight on this very large tonnage went into the pockets of owners of foreign bottoms, and all collateral charges for collecting, exchange, etc., have gone to the credit of foreign bankers.

AGRICULTURE IN NATAL.

Consul-General Stowe writes from Cape Town, June 21, 1898:

CROPS.

Crops raised by Europeans, 1897.

Articles.	Quantity.	Articles.	Quantity.
Arrowroot ....cwts...	84	Oilnuts....cwts...	17
Bananas....tons...	1,148	Onions ....bushels...	3,399
Barley.... ....bushels...	6,685	Orchard....value...	£19,362
Beans ....do.....	4,900	Pease....bushels...	3,138
Buckwheat ....do.....	978	Potatoes....do.....	125,232
Cayenne pepper....pounds...	2,000	Pumpkins....tons...	2,349
Coffee....cwts...	327	Sugar ....cwts...	365,368
Cotton....do.....	188	Sweet potatoes....bushels...	328,528
Green crops....tons...	31,303	Tea....pounds...	8,048,930
Hay (artificial)....do.....	3,078	Tobacco ....do.....	84,896
Kaffir corn....bushels...	119,632	Turnips....tons...	7,486
Maize ....do.....	680,309	Vegetables ....do.....	4,199
Mangel-wurzel ....tons...	220	Wattle bark....do.....	2,910
Millet ....bushels...	39	Wheat....bushels...	55,815
Oats....do.....	45,579		

Crops raised by natives.

Articles.	Quantity.	Acres reaped.
Corn:		
Indian....bushels...	1,546,743	141,356
Kaffir....do.....	1,146,807	129,911
Coffee ....pounds...	700	25
Potatoes:		
Common....bushels...	27,024	425
Sweet....do.....	792,922	24,400
Pumpkins....tons...	45,101	11,740
Sugar cane....do.....	516	73
Tobacco ....pounds...	79,619	1,363

Crops raised by Indians.

Articles.	Quantity.	Acres reaped.
Beans ..... bushels...	39,483	3,938
Corn (Kaffir) ..... do.....	207,258	129,682
Oilnuts ..... do.....	1,032	158
Potatoes ..... do.....	4,914	939
Sweet	.....	746
Pumpkins ..... tons...	257	496
Sugar ..... cwts...	33,200	1,141
Tobacco ..... pounds...	150,106	1,870

STOCK.

Average value of stock.

Description.	Value.	Description.	Value.
Ducks (2)	$0.81	Mules	$74.26
Cattle (horned)	32.64	Oxen:	
Cows (milch)	42.51	Slaughter	40.47
Fowls (2)	.64	Draft	44.85
Goats	2.87	Sheep:	
Angora	3.50	Common	3.95
Horses:		Wooled	4.70
Saddle	83.35	Swine	7.40
Draft	137.76		

AGRICULTURAL IMPLEMENTS.

Under date of June 18, Mr. Stowe says:

The following agricultural implements were in the possession of Europeans and natives at the end of 1897. A large number were made in the United States:

Description.	European owners.	Native owners.
Plows	2,792	18,849
Harrows	2,463	920
Wagons	2,357	1,196
Carts	1,790	651
Mowing machines	456	2
Reapers	176	11
Cream separators	244	.....
Other machinery	1,571	213

WATCHES AND CLOCKS IN ARABIA AND SOUTH AFRICA.

The following extracts are taken from letters from the United States consular officers at Aden and Cape Town, in answer to inquiries made by an American watch-case company* concerning the watch and clock trade in Arabia and South Africa:

Consul Cunningham, of Aden, says, August 10, 1898:

There is no firm in Arabia which handles watches on a large scale, and there are no regular watch dealers in Aden. The trade is carried on by the general exporting and importing merchants. There were only 489 clocks and watches imported during the year ending March 31, 1897. Of this number, 119 were from the United States. What percentage of these are watches, I was not able to ascertain; but I should suppose at least 75 per cent of the entire importation would be clocks. There is no duty on this class of imports.

I am not able to furnish any catalogues or circulars pertaining to the watch trade in Arabia, nor do I think there are any to be had.

The kinds of watches and clocks which are sold here are of a cheap grade, none of which would likely retail in America for more than $8 or $10, and there is no reason why the United States should not have a greater amount of the watch and clock trade than it does, as I am told the American goods always give satisfaction.

There is no commercial agency in Arabia similar to Dun's for obtaining reliable information regarding the responsibility of merchants in Aden, and the proper way to ascertain this information would be for the American merchant, through his local bank, to make inquiries of the National Bank of India here; or, time may usually be saved by having the inquiry made direct to the National Bank of India, home office in London, England, where ratings are regularly forwarded by their branch here. But this inquiry must always come through the local bank.

Consul-General Stowe, of Cape Town, says, under date of August 2:

There is no such publication in Africa as Dun's or Bradstreet's, and the only information to be obtained with regard to the responsibility of dealers must come through the banks. The export commission houses of the United States, which have for so long been doing business with the South African merchants, are better able than anyone else to speak of their reliability.

While there are merchants who deal exclusively in jewelry and

* Advance Sheets of this report have been sent to the company requesting information.

sell watches and clocks, these articles are also sold by some merchants who conduct a general business. The duty upon watches and clocks is 9 per cent ad valorem. No catalogues issued by dealers are to be found.

Both the very cheap and the very best makes of watches and clocks are on sale. They have been introduced by export commission houses of the United States and salesmen sent by the manufacturers. The total declared value of watches and watch cases imported into South Africa during 1897 was $237,256.78. The countries from which they were received, in the order of the quantity imported, were the United Kingdom, United States, Germany, France, Belgium, and Holland. The imports from the United States amounted to $91,806.70. No separate record for watches and watch cases is kept by the custom-house authorities.

BUSINESS HOUSES IN ERZERUM.

During the last six months I have received such a number of letters from merchants and manufacturers in the United States requesting the names of merchants in Erzerum engaged in certain lines of business that I have had prepared a list of the principal business men of this city, which I inclose, arranged according to their respective trades.

Letters and circulars should be addressed "Erzerum, Turkey in Asia," and must be written either in Turkish or French; preferably Turkish.

LEO BERGHOLZ,
Consul.

ERZERUM, *July 8, 1898.*

PRINCIPAL MERCHANTS OF ERZERUM, TURKEY, ARRANGED ACCORDING TO THEIR RESPECTIVE TRADES.

Dry goods.

Alemder Zadi Brothers.
Mhurdar Zadi Brothers.
Agadjanian Herganian.
Hovayen Hebeyan.
Hohannes Agadjanian.
Mangassarian Brothers.
Manuk Karabedian.
Racar Hebbeian.
Orakel Zurian.
Orakel Kalosian.
Ardahanli Hadji Redjeb.
Hadji Shakir Aga Brothers.
Aga Hadjilar.
Hafis Hadjilar.
Haralambo Saca.
Stepan Simonyan Mushli.
Etemaa Zadi Raghip.
Kevork Pambouklian.
Bogas Djivanian.
Artin Djivanian.
Aganik Saboundjian.

Indjijian Brothers.
Carabet Dergossian.
Hohannes Elfazian.
Manuel Manuilides.
Markar Erganian.
Dicranian Brothers.
Tamahker Oghlu Agop Canavizian.
Rupen Jakian.
Migirditch Gazigian.
Pambouktchian Brothers.
Der Azarian Brothers.
Berzezian Brothers.
Alemder Zadi Brothers.
Avidis Tchitchian.

Hardware.

Miscirian Cazazian & Co.
Sobadji Sarkis.
Agop Oglanian.
Tchelingir Agop.
Gaytandjian Brothers.
Alemder Zadi Brothers.
Nemli Oghlu.
Misaak Vanetzian.
Pantcho Cabayanidis.

Groceries.

Fis Calicopovlo.
Alemdar Zadi Brothers.
Pantcho Cabayanidis.
Muhurdar Zadi Brothers.
Costi Triandafilidis.
Misirli Oghlu.
Costantian Cadinof.
Yorgo Haralambidid.
Yorgo Kefabidis.
Jan Makridid.
Seferian Brothers.

Drugs.

Egiya Aga Ketchi Bachian.
Hohannes Elfazian.
Indjidjian Brothers.
Gaytandjian Brothers.
A. Laviny, M. D.
Agop Ouzunian.
Agop Djajian.
Artin Der Refaelin.

Biscuits.

Misak Vanetzian.
Setrak Hudaverdian.
Artin Djivanian.
A. Laviny, M. D.
Agop Ouzunian.
Manuel Manuelidis.

Jewelry.

Kevork Pambuklian.
Artin Djivanian.
Bogos Djivanian.
Misaak Vanetzian.
Minas Haboulglian.

Lamps.

Kevork Panbouglian.
Artin Djivanian.
Bogos Djivanian.
Aganic Saboundjian.
Karabed Derugassiar.
Manuel Manuelidis.
Hohannes Elfazian.
Indjidjian Brothers.
Markar Erganian.
Agop Ganavizian.
Dikranian & Brothers.

Sewing machines.

Satehan Brothers.
Bogos Djivanian.
Artin Djivanian.
Manuel Manuelidis.
Gaytandjian Brothers.

Agricultural implements.

Migirditch Gaytandjian.
Bogos Djivanian.
Resul Pacha Zadi Ihsan, Bey.
Vhbi Pacha Zadi Galib, Bey.
Alemdar Zadi Brothers.
Suliman Aga Zadi Tefic, Bey.
Pasturmagian Brothers.

Leather.

Saatchian Brothers.
Israel Saraydarian.
Misiryan Kazazian.
Alemdar Zadi Brothers.
Hohannes Zopounian.

Stationery.

Kevork Panhouklian.
Artin Djivanian.
Bogos Djivanian.
Indjidjian Brothers.
Tamahker Oghlu Agop Ganavizian.
Hohannes Elfazian.

Memed Ali Aga Toaftchi.
Carabed Derugassian.
Aganik Saboundjian.

Beer and wines.

Misak Venetzian.
Manuel Manuelidis.
A. Laviny, M. D.
Agop Ouzunian.
Setrak Hudaverdian.

Shoes.

Kevork Pambouklian.
Djivanian Artin.
Bogos Djivanian.
Aganik Saboundjian.
Manuel Mamueldis.
Indjidjian Brothers.
Misirian Gazazian & Co.
Israel Saraydarian.
Saatchian Brothers.

THE WORLD'S SUPPLY OF WHEAT FOR BREAD.

Consul Halstead writes from Birmingham, September 8, 1898:

The British Association for the Advancement of Science began its annual meeting at Bristol yesterday. It will be remembered that this association met in Canada last fall, and its proceedings attracted a great deal of attention and were fully reported in the leading American newspapers. I inclose a review of the speech of Sir William Crookes, the president of the association, published in the Birmingham Post, and a clipping from the Birmingham Argus.

[From the Birmingham Daily Post, September 8, 1898.]

"England and all civilized nations stand in deadly peril of not having enough to eat." That was the extremely alarming statement made yesterday by Sir William Crookes, president of the British Association, in his address at the opening of the Bristol meeting. The inhabitants of the United Kingdom, Sir William Crookes begins by saying, are wheat eaters, so far as grain is concerned. The consumption of wheat per head of the population is over 6 bushels a year; the population may be taken in round numbers at 40,000,000, therefore 240,000,000 bushels of wheat are required annually, increasing annually by 2,000,000 bushels to supply the increase of population. Now, in order to be safe, we ought to grow this quantity of wheat in our own country, but we do nothing of the kind. On the contrary, we grow about a quarter of the wheat we want for our ordinary consumption, and we import the other three-quarters. So much does the country live from hand to mouth in regard to this matter, that our fullest supply is never equal to more than fourteen weeks' consumption, and, even if the scheme of national granaries were adopted, we could not store an additional amount of more than another fourteen weeks' supply. If war broke out, wheat would be treated as contraband, and our only chance of protecting it would be to increase the navy, so as to provide sufficient escort to beat off hostile vessels. What, then, is to be done in the prospect—perhaps in the actual face—of circumstances which might easily become calamitous? We could, Sir William Crookes supposes, grow at home all the wheat required, but that would mean the cultivation of 8,250,000 acres of land, or 13,000 square miles of good wheat-growing land. That would be "equal to a plot 110 miles square of quality and climate sufficient to grow wheat to the extent of 29 bushels per acre." This, Sir William Crookes observes, "does not seem a hopeless demand." In reality, however, as he himself shows by some further observations, it is a hopeless demand;

indeed, it is one which could not possibly be complied with. So we are driven back to the hard and disturbing fact that 75 per cent—180,000,000 bushels—of our wheat supply must be obtained from other countries, unless, indeed, which is not likely, we supplant wheat to a great extent by other cereals, such as indian corn, or by the use of other bread-making materials, such as bananas or similar tropical products.

It is easy to say that we are rich enough to buy all the wheat we want, and that we can afford to build any number of ships of war to convoy the wheat in case of difficulties with hostile powers. The latter condition may be assumed; but how as to the former? Can we buy the wheat whenever we want it? The answer of Sir William Crookes—and this is, perhaps, the most serious point of his case—is that the wheat-exporting countries from whence we draw our supplies are certain to have only a steadily diminishing quantity of wheat to sell, and that in the course of a few years they may find it difficult to provide even for their own wants. Here the president cites statistics which certainly have an alarming look: "In 1871 the bread eaters of the world numbered 371,000,000; in 1881, the numbers rose to 416,000,000; in 1891, to 472,600,000; and at the present time they number 516,500,000." He is taking, it will be understood, the total population of all countries in which wheaten bread is a staple food, and is assuming that the whole of them are dependent upon wheat for their chief means of sustenance. Such a calculation is obviously open to many corrections by way of reduction; but for the sake of the argument it may be roughly accepted. Now, taking the supplies from the 1897–98 harvest at 1,900,000,000 bushels, and assuming—on the 6-bushel annual estimate—that the wheat eaters of the world require for food and seed two thousand three hundred and odd million bushels, there is a deficiency of about 400,000,000 bushels, which has been covered by surplus grain reserved from previous excessive harvests. These reserves have been practically eaten up; the harvest now being reaped is, generally speaking, a deficient one; and therefore, "it is clear that we are confronted with a colossal problem that must tax the wits of the wisest. When the bread eaters have exhausted all possible supplies from the 1897–98 harvest, there will be a deficit of 103,000,000 bushels of wheat, with no substitution possible, unless Europeans can be induced to eat indian corn or rye bread." But, if more wheat is wanted, can not more wheat be grown by bringing a greater area of wheat land into cultivation? Sir William Crookes does not believe this to be possible, and he enters into an elaborate series of calculations to sustain two main conclusions—first, that the available area of wheat-growing land all over the world is being rapidly absorbed; and, secondly, that, owing to the growth of wheat-eating populations, the chief present exporting countries will not in about a generation, say five-and-twenty or thirty years, be able to do more than provide for their own wants, leaving nothing for export to countries like our own. Experts in agriculture, in commerce, and in statistics will probably find themselves able to pick Sir William Crookes's figures to pieces; and we suspect that it will be found that he has seriously exaggerated the danger of failure in the wheat supply of the world, and has also underestimated the area of land capable of being brought into cultivation. Still, allowing for all probable deductions, the prospect he sketches is sufficiently gloomy to call for the gravest consideration. "Are we to go hungry, and to know the trial of scarcity? That is the poignant question. If bread fails—not only for us, but for all the bread eaters of the world—what are we to do? We are born wheat eaters. Other races, vastly superior to us in numbers, but differing widely in material and intellectual progress, are eaters of indian corn, rice, millet, and other grains; but none of these grains have the food value, the concentrated health-sustaining power of wheat, and it is on this account that the accumulated experience of civilized mankind has set wheat apart as the fit and proper food for the development of muscle and brains."

Assuming that all the facts and figures given by Sir William Crookes are absolutely right, and that his deductions from them are incontestable, are we then to sit down and despair of the future? Not so, our monitor tells us. Across the gloom he projects a ray—nay, more than a ray, a flood of sunshine. "Starvation may be averted through the laboratory. Before we are in the grip of actual dearth, the chemist will step in and postpone the day of famine to so distant a period that we, and our sons and grandsons, may legitimately live without undue solicitude for the future." How? By the use of liberal supplies of nitrates as manure. "Wheat preeminently demands nitrogen, fixed in the form of ammonia or nitric acid. All other necessary constituents exist in the soil; but nitrogen is mainly of atmospheric origin, and is rendered 'fixed' by a slow and precarious process which requires a combination of rare meteorological and geographical conditions to enable it to advance at a sufficiently rapid rate to become of commercial importance." One invaluable source of fixed nitrogen is to be found in the sewage of our great towns; and all this, instead of being wasted by pouring it into rivers, and ultimately into the sea, ought to be used as corn-growing manure. Here Sir William Crookes quotes the pregnant warning uttered a generation ago by Liebig: "Nothing will more certainly consummate the ruin of England than a scarcity of fertilizers—it means a scarcity of food. It is impossible that such a sinful violation of the divine laws of nature should for ever remain unpunished; and the time will probably come for England, sooner than for any other country, when, with all her wealth in gold, iron, and coal, she will be unable to buy one-thousandth part of the food which she has, during hundreds of years, thrown recklessly away." The nitrate of soda beds in Chile still supply vast quantities of the necessary fertilizer, but these in comparatively few years will probably be worked out. Where, then, are we to obtain our supplies of fixed nitrogen to replenish the exhausted wheat fields, and to raise them, as Sir William Crookes estimates may be done, to a yielding capacity of 30 bushels an acre? The answer is that we must get the nitrogen from the air, and fix it by chemical means. "In its free state, nitrogen is one of the most abundant and pervading bodies on the face of the earth. Every square yard of the earth's surface has nitrogen gas pressing down on it to the extent of about 7 tons; but this is in the free state, and wheat demands it fixed." The fixation of atmospheric nitrogen, therefore, is "one of the great discoveries awaiting the ingenuity of chemists. The fixation of nitrogen is a question of the not far distant future. Unless we can class it among certainties to come, the great Caucasian race will cease to be foremost in the world, and will be squeezed out of existence by races to whom wheaten bread is not the staff of life." Some progress has already been made. Sir William Crookes appeals to experiments conducted by himself and by Lord Rayleigh which show that nitrogen in the air may be burned with the result of producing nitrous and nitric acids; and these experiments, applied by electric agency on a commercial scale, "may not unlikely lead to the development of a mighty industry destined to solve the great food problem." The final conclusion of the speaker is that "the artificial production of nitrate is clearly within view, and by its aid the land devoted to wheat can be brought up to the 30-bushels-per-acre standard." That is, at any rate, a comforting assurance.

[From the Birmingham Argus, September 8.]

The profoundly weighty remarks in Sir William Crookes's presidential address to the British Association, on the means of averting the world's starvation, suggests, says a correspondent, either a gift of prophecy, or the unconscious operation of two minds on the same subject at the same time, which has been associated

with so many great discoveries. Sir William indicates the fixation of atmospheric nitrogen as the only solution of the difficulty, providing, as it would, the necessary food for the increase in the wheat crop, and he more than suggests the imminence of this stupendous discovery. It is a singular fact, says the London Mail, that this problem was almost at that moment receiving its solution at the hands of one of our chemists. It involves the synthetic combination of the nitrogen and hydrogen in air and water, by an extremely simple and inexpensive process, quite apart from electrical agencies. This process is now complete, and will shortly be before the scientific world. All that remains is to carry it out on a commercial scale.

FAILURE OF HARVEST IN RUSSIA.

Detailed information in regard to the failure of harvests in certain sections of Russia having been requested by a Massachusetts news association, a cablegram was sent by the Department to Ambassador Hitchcock, at St. Petersburg, requesting him to report on the present condition of the crops. Under date of September 8, the ambassador telegraphs that, according to the Minister of the Agricultural Department, the information will not be available until next month. The returns from the harvests have not yet been completed, and the reports are imperfect and conflicting.

On August 18, 1898, Consul-General Holloway transmitted from St. Petersburg two newspaper accounts of the Russian famine.* They are given below, in part:

[From the Birzshevye Viedomosti, July 6–18, 1898.]

The principal administration of the Red Cross Society has to-day received from His Imperial Majesty the Emperor 500,000 rubles ($386,000) for the assistance of the peasants whose means have been straitened, owing to the bad crop of cereals in 1897 in some localities. It is no secret to anyone that the present bad harvest is not what is called famine. There have been no cases of death from hunger during the past year and no epidemic of typhoid fever. The bad harvest has seriously embarrassed the peasant and deprived him of the support on which he could build his hopes for the future. The peasant population of the central governments, owing to a series of circumstances—such as the famine of 1891–92, the exhaustion of the soil, the want of forests, the increase of the population, the small area of land which each family possesses, the illiteracy of the peasants, as well as their ignorance of advanced methods of cultivating the ground, which becomes poorer every year—have found it impossible to put something by for the future. This new calamity, caused by the failure of crops in previous years, has increased their misfortunes.

There is an abundance of grain in Russia. Regraters and grain dealers have sufficient rye to feed the whole localities for many months. The trouble is that the

* For a previous report on this subject, see CONSULAR REPORTS No. 216 (September, 1898), p. 72.

peasants have no money to buy it. In a whole village, it is difficult to find change for 3 or 5 rubles. The number of cattle has been decreasing since the last famine. Whole villages are living upon potatoes and water. The prosperity of the peasant is declining.

At present, owing to assistance from the Government and private channels, the peasants have received enough money to enable them to sow their fields. The Czar has also provided horses, known as the "Czar's horses," to help peasant families till their ground and keep them from going to increase the number of the city proletariat. The "Czar's cows" will save with their milk hundreds of children from disease and even death. Perhaps this money of the Czar will give roofs to many houses.

[From the Novoe Vremia, August 5-17, 1898.]

Seven districts in the government of Kazan are entirely without bread and without fodder this year. They had suffered during the famine of 1891–92. The years 1893–1896 gave good harvests; but the prices on grain were low, and the peasants had not paid their debts contracted during the last famine, and therefore could not remedy their past troubles. In 1897, the harvest of spring cereals was again very bad; finally, this year there is a very bad harvest of cereals and no fodder.

The winter cereals were sown in very dry soil; there was little snow last winter, and then came summer with hot winds and a scarcity of rain, drying up the earth and resulting in a short crop of grass; cereals did not thrive, and even the leaves on the trees dried up and fell. In one district, less than 3 per cent of 369,900 acres planted in rye will yield a satisfactory crop, while more than 35 per cent of the fields will give no crop at all. Beginning with August, hundreds of thousands of peasants will have to be fed, in order that they should not perish from famine.

But the greatest calamity of the peasant is that the cattle and horses are dying from lack of fodder. The Russian cattle, always half starved during winter, are accustomed to revive their strength during spring in the fields. This year, however, the spring was very cold, and until the end of April the ground was covered with snow. As soon as the ice disappeared, hot winds began to blow and burned all the grass. About the middle of July appeared a murrain on the cattle and horses, and it was soon proved that the animals were dying of hunger. The price of hay is beyond the reach of the peasants, so that they now find themselves unable to procure sustenance either for their families or for their horses and cattle.

DISTILLING INDUSTRY IN RUSSIA.

Consul-General Holloway sends from St. Petersburg, August 16, 1898, the following statistics of Russian trade in distilled spirits:

The total distillation of spirits in Russia from July 1 to October 1, 1897, amounted to 3,288,076 gallons During the same period in 1896, it was 3,587,663 gallons, and in 1895, 3,927,287 gallons; consequently, in 1897, it was less than in 1896 by 299,000 gallons or 8.4 per cent, and less by 639,000 gallons or 16.3 per cent than in 1895. There were 386 distilleries during 1897, against 360 in 1896.

The following table shows the number of gallons of spirits distilled during July–September, 1895, 1896, and 1897, in the various provinces:

Government.	1895.	1896.	1897.
	Gallons.	*Gallons.*	*Gallons.*
Northern	54,174	89,289	59,652
Eastern	420,164	372,65	398,496
Industrial	457,245	433,598	518,089
Central	1,756,448	1,452,270	1,239,107
Little Russian	198,202	151,429	114,274
Baltic	211,035	193,790	180,144
Northwestern	327,772	289,145	309,012
Southwestern	337,951	363,300	262,350
Southern	80,660	164,364	47,289
Vistula	84,542	77,823	159,662
Total	3,927,293	3,587,662	3,288,075

The following table shows the distribution of spirits on hand on the 1st of October of each of the three last seasons, in the various provinces:

Government.	1895–96.	1896–97.	1897–98.
	Gallons.	*Gallons.*	*Gallons.*
Northern	1,037,542	975,398	721,950
Eastern	2,406,141	2,522,247	2,363,222
Industrial	1,493,013	2,144,928	1,605,766
Central	2,107,587	3,559,663	2,534,282
Little Russian	958,273	1,468,915	2,033,906
Baltic	710,988	886,762	743,560
Northwestern	1,332,054	1,439,008	1,976,704
Southwestern	1,699,422	2,830,912	4,069,801
Southern	1,395,705	2,248,383	3,326,895
Vistula	1,223,963	1,426,480	1,038,809
Total	14,364,688	19,502,696	20,414,895

The movement of spirits in European Russia during the first three months of the last three seasons was as follows:

Description.	1895–96.	1896–97.	1897–98.
	Gallons.	*Gallons.*	*Gallons.*
Production	3,927,287	3,587,663	3,288,076
Reserves at the beginning of the season	32,189,621	37,169,476	38,487,235
Total	36,116,908	40,757,139	41,775,311
Reserves on October 1	14,364,688	19,502,696	20,414,895
Supply	21,752,220	21,254,443	21,360,416
Export	851,605	743,127	1,016,437
Remained for consumption	20,900,615	20,511,316	20,343,979

FREIGHT TRAFFIC ON RUSSIAN RAILROADS.

The total length of railroads constructed in Russia during 1897 amounts to 1,018 miles. The Government owns 16,773 miles, private companies 8,500 miles, and Finland 1,565 miles. On January 1, 1898, there were 26,838 miles of railroad in the Russian Empire.

The aggregate amount of the principal freight for 1896 and 1897, showing relative increase or decrease, is as follows:

Description.	1896.	1897.
	Tons.	*Tons.*
Cereals arrived at frontier stations	6,300,198	5,257,512
Sent from principal railroad stations:		
Pit coal	6,555,456	7,529,400
Kerosene, naphtha, and products thereof	3,084,120	3,413,808
Salt	871,056	925,020

The quantity of products transported from the principal stations of export has increased for all kinds of freight, especially pit coal, naphtha, and petroleum. The movement of grain has decreased by 1,044,504 tons, or 6.6 per cent.

The following table shows the regions of arrival of cereals transported by rail, and their amount in tons:

From—	1896.	1897.
	Tons.	*Tons.*
Black and Azof Sea ports	3,157,416	2,179,008
Baltic ports	2,135,178	2,004,858
Western overland points	1,000,080	1,061,568
Baku and Petrovsk	7,524	12,078
Total	6,300,198	5,257,512

The above table shows a decrease in the amount of freight arriving at the southern points, whereas in the western overland custom-houses, as also in Baku and Petrovsk, it has increased. A marked decrease can be seen in the Black Sea and Azof ports, caused by a decrease by 26.5 per cent of the quantity of wheat transported. The station reports show that the greatest decrease is in the amount of cargo arriving at Novorossisk (53.6 per cent); Odessa has 36.8 per cent, and Nikolaevsk 12.8 per cent less than the preceding year.

The quantity of pit coal transported in 1897 increased 14.8 per cent, principally owing to the increase by 23 per cent of the quantity transported from the Donetz basin. This gain was caused by the demands on the part of metallurgical factories. Besides, many of

the railroad lines, such as the Moscow-Kazan and the Southwestern, began to use mineral fuel instead of wood. During the spring, the Marine Department decided to substitute at the Kolpino factories Russian for English fuel. This created a considerable demand for the Donetz coal. The Polish basin also exported 6.5 per cent more coal than in 1896.

The following table shows the railroads by which the coal cargo was principally transported, and the amounts thereof:

Railroad.	1896.	1897.
	Tons.	*Tons.*
Warsaw-Vienna	2,473,920	2,542,446
Lodz	1,110,978	1,125,522
Ivangorod-Dombrovsk	544,788	589,608
Vistula	326,160	349,794
Catherinsk	1,911,762	2,339,982
Kursk-Kieff-Sebastopol	624,384	781,290
Kharkov-Nikolaevsk	463,554	499,212
Southeastern	599,796	838,026
Southwestern	596,250	751,410
Moscow-Kursk	176,184	160,362

The transport of petroleum products increased in 1897, compared with 1896, by 10.7 per cent. This was caused, first, by the annual increase of the consumption of that fuel, and, secondly, by the fact that the water of the Volga was very shallow this year, which required shipments to be made by rail. The introduction of a new tariff changed the activity of some of the petroleum markets. Nizhni Novgorod, for example, increased its consumption by 39 per cent, compared with the preceding year. Of the other principal stations the activity of which has been increased, the first place belongs to Baku, which exported petroleum products by 22.5 per cent over the preceding year. The export of petroleum and its residues from Grozny increased 195.1 per cent.

The following quantities of salt have been exported:

From—	1896.	1897.
	Tons.	*Tons.*
Kharkov-Sebastopol Railroad (region of the Kursk)	503,190	515,574
Baskunchak	151,290	178,632
Odessa port	88,416	91,872
Tsaritsine	34,758	24,444
Saratov	12,672	29,376
Other principal stations	80,730	85,122

Although the trade in salt was not very successful last year, still the shipments of salt increased in 1897, compared with 1896, by 6.2 per cent.

W. R. HOLLOWAY,

ST. PETERSBURG, *September 3, 1898.* *Consul-General.*

PATENTS IN RUSSIA.

Ambassador Hitchcock writes from St. Petersburg, under date of August 16, 1898, that, in view of an erroneous impression that aliens can not obtain patents in Russia, he wishes citizens of the United States to know that foreigners, upon complying with the patent laws, are accorded the same protection as Russian subjects. The fact is, says Mr. Hitchcock, that 70 per cent of the patents granted in Russia are to aliens. He incloses the following summary of the patent law, made by a firm in St. Petersburg:

EXTRACTS FROM THE NEW RUSSIAN LAW OF MAY 20 (JUNE 1), 1896, CONCERNING PATENTS FOR INVENTIONS AND IMPROVEMENTS.

I.—General rules.

Patents can be applied for in order to protect the exclusive right of using inventions and improvements in the sphere of industry. Such patents are granted to Russian subjects, as well as to foreigners, and are in force not only for the inventors themselves, but also for their successors.

Patents are granted only for inventions and improvements which represent an essential novelty in their totality or in some part or parts, or in a peculiar combination of parts. One patent can cover several inventions or improvements when, combined, they form a distinct process and can not be used separately

No patent can be granted for inventions and improvements (*a*) which represent scientific discoveries and abstract theories; (*b*) which are contrary to public order, morals, or decorum; (*c*) which are already patented in Russia or have been in use without patent, or are described in literature* with sufficient clearness for their reproduction, before the day of application for a patent; (*d*) which are known abroad without being there patented, or are patented in the name of another party, the right of exclusive use of the same not being transferred to the party applying for a patent in Russia; (*e*) which contain no essential novelty and are nothing but unessential modifications of inventions or improvements already known. No patents are granted for chemical and eatable substances and medicines.†

In applying for a patent, the petition must be accompanied by a full specification of the invention or improvement in the Russian language and a receipt from the treasury for 30 rubles ($15.42) for examination and publication of the application.‡ This sum is not returned in any case. Poor Russian subjects can be freed from this fee. Applications of persons residing in foreign countries must be filed by an empowered representative residing in Russia.

The specification must be precise, clear, and detailed, so as not to require any explanation. The same must be provided with claims. In case of necessity, the specification must be accompanied by drawings and models. In the course of three months from the date of filing the application, the specification can be completed and amended, but without any substantial change in the same.

The applicant receives a certificate of protection, this being published for general

*Russian or foreign.

†Methods and apparatus for producing chemical and eatable substances can be patented.

‡The filing of a specification in a foreign language in the first instance, for the sake of immediately receiving a certificate of application, and subsequent presentation of a Russian translation of the same, in the course of three months, is no longer permitted.

information. Thereafter, it is no longer required that the invention or improvement be kept secret, and the applicant can, if he desires, transfer to others his right to obtain the patent, as well as give provisional warning to prevent infringement. Should the granting of the patent be refused, the certificate of protection loses its force.

Before the granting of the patent shall have been decided, outside persons can give notice of opposition to the grant, proving at the same time that the invention or improvement is already known or in use. Such opposition is communicated to the applicant, who, thereupon, can present an explanation in the course of three months. In case the applicant is accused of appropriation of an invention or improvement not belonging to him, the parties are free to apply to a court of law.

After preliminary examination of the invention or improvement by a member of the technical committee of the Department of Trade and Manufactures, the matter is submitted to the respective section of the committee. The applicants or their representatives can be invited by the president of the committee to appear at the session, in order to furnish verbal explanations. The committee does not discuss any questions concerning the utility or property of the invention or improvement, but is bound to determine whether the invention or improvement itself answers the conditions above cited. The committee decides whether the patent is to be granted with or without restrictions, or refused—with indication of the reasons for the respective decision.

The patent is granted to the first applicant, except in case he be accused of having appropriated to himself an invention or improvement belonging to another party, or in case patent on the same invention or improvement has been applied for on one and the same day by different parties. In the latter case, and if the invention or improvement is acknowledged to be new, it is proposed to the applicants to agree to take the patent in their joint names. In case no such agreement takes place in the course of three months after the parties have received notice of such proposal, the patent either is not granted at all, or only after decision by a court of law to whom the right of priority for obtaining the patent belongs.

Patents are granted for terms up to fifteen years, counting from the day of their signature. The effect of a patent granted for an invention or improvement patented in a foreign country, before the application for a patent in Russia has been filed, limits the term of the Russian patent to the term of the foreign patent, and, in case the invention was patented in different foreign countries, the Russian patent expires at the same time as the foreign patent which was granted for the shortest term.

In the course of three months, after having received notice that the patent has been granted, the applicant is bound to present a receipt of the treasury for payment of the fee for the first year of the term of patent.* In default hereof, the proceedings are stopped, and a subsequent demand can only be treated as a new application.

An applicant who is not satisfied with the decision of the section of the committee can appeal against the same in the course of three months after having received notice of such decision, being bound in this case to present a receipt of the treasury for payment of 15 rubles ($7.71).

The complaints (appeals) mentioned in article 18 are intrusted to the judgment of experts who took no part in the first examination of the matter by the respective section of the committee, and thereupon a decision is taken by the general meeting of the committee, wherein the experts having taken part in the first examination assist only with advice.

---

* For fees (annual taxes), see page 396.

When the patent has been granted and the fee for the first year paid by the applicant, the letters patent are issued. In the patent is mentioned, among other things, that no patent has previously been granted for the same invention or improvement, and that the Government does not warrant the applicant's ownership of the invention or the usefulness of the latter. In case a patent is granted for an alteration of an invention, which has been patented by another person, it is declared in the patent that the use thereof is permitted only with the consent of the said person.

The patents granted are advertised and, not later than three months after delivery of each patent, the same is published in full. Besides, the Department of Trade and Manufactures issues annually a register of all the patents granted in the course of the year, and keeps a record of the same and a collection of the specifications thereof which can be inspected by everybody.

The patentee has the exclusive right to use the invention or improvement indicated in the patent during the whole period of its term; therefore he can (1) work the invention or improvement and grant the right to use it to other persons, (2) sell the patent for the whole or part of its term, and (3) prosecute by law every arbitrary use of his patent right and every other violation of such right from the day when the delivery of the certificate of protection was made publicly known, and sue for recovery of damages for the losses sustained in consequence thereof. After the decease of the patentee or of his successor, the patent passes to his heirs in accordance with the general rules of inheritance.

The patentee is bound to observe all the laws and regulations now existing and to be enacted hereafter concerning the use of patent inventions or improvements.

The patentee is bound, within five years from the date of signature of the patent, to put the invention or improvement into practical use, and to file with the Department of Trade and Manufactures, as a proof thereof, a certificate, delivered by the authority nominated for this purpose by the Minister of Finances.

Assignments of patents must be communicated to the Department of Trade and Manufactures, with the proper documents.

In the course of two years from the date of publication of the grant of patent, other persons can contest the patentee's right to the whole or any parts of the respective invention or improvement, as well as the legality of granting of the patent; but after the expiration of this term, the patent can be annulled only by a criminal court of law, in case of a criminal action.

Before the patent expires, the patentee can demand an additional patent for an addition to the invention. The term of the additional patent expires together with the term of the original patent.

Other persons can obtain, according to general rules, patents for inventions or improvements completing or modifying patents already granted, but not before the expiration of one year from the date of publication of the first patent. The inventor or his successors, and the person having obtained a patent for a complement or alteration of the original invention or improvement, can use the complement or alteration only by mutual agreement. This rule is also applied in case the patent has been granted for a peculiar combination of parts, only a few of which were patented in Russia.

Patents become void: (1) Upon expiration of their term; (2) for want of payment of the fee fixed in advance for each year of the term of the patent;* (3) for not working the patent as prescribed; (4) in case it is decided by a court of law that the patent has been granted to the wrong person, or not in accordance with established rules; and (5) in case it is proved that the specification does not sufficiently describe

* No delay for payment is allowed, and the patentees are not reminded that the fees are due.

the invention to enable it to be used without the aid of the inventor. The lapsing of patents is published for general information.

In case the certificate of protection or the letters patent have become lost, the Department of Trade and Manufactures must be informed, in order to advertise such loss for public knowledge. The person who has lost the said documents can, on presentation of a receipt of the treasury for 10 rubles ($5.14), receive a copy of the certificate of protection at once, and a copy of the letters patent after the expiration of one month from the date of the publication of the loss thereof.

II.—Fees payable on letters patent.

(1) For every patent granted for inventions or improvements, a fee is paid to the State treasury as follows: For the first year the patent is in force, 15 rubles; for the second, 20 rubles; For the third, 25 rubles; for the fourth, 30 rubles; for the fifth, 40 rubles; for the sixth, 50 rubles; for the seventh, 75 rubles; for the eighth, 100 rubles; for the ninth, 125 rubles; for the tenth, 150 rubles: for the eleventh, 200 rubles; for the twelfth, 250 rubles; for the thirteenth, 300 rubles; for the fourteenth, 350 rubles; and for the fifteenth year, 400 rubles.

(2) The fees fixed in the foregoing article (1) are to be paid: for the first year the patent is in force, not later than within three months from the date of notice given to the person by whom the application was filed that his demand has been approved by the technical committee of the Department of Trade and Manufactures; and for the following years in advance, for each year as long as the patent remains in force, counting from the day of the signature thereof. The fee paid is not returned in any case whatever.

(3) In case of evident poverty of Russian subjects applying for a patent, the Minister of Finances is authorized to exempt them from payment of the fee for the first three years of the term of the patent.

(4) In case an additional patent is granted to a person having obtained a patent for an invention or improvement, a fee of 20 rubles, payable once for all, is collected in favor of the treasury of the State.

PATENTS AND COPYRIGHTS IN CHINA.

Under date of July 18, Minister Conger sends from Pekin the following clipping from the North China News, of July 12, purporting to be a translation of a recent decree of the Emperor in regard to the enactment of copyright and patent laws.

It would appear from this decree, says Mr. Conger, that China is about to give her men of literary and inventive genius the same recognition and protection accorded them by other nations; and it is indicative of the great changes soon to take place in the country.

The following important imperial decree, which is really the promise of the enactment of copyright and patent laws, was issued on the 5th instant:

From ancient times until now, the first duty of government has been to bring order out of chaos and shape the rough materials at hand. With the increasing facilities of international commerce, our country has been filled with an influx of scientific, mechanical, and artistic things which are an education to the masses, whose eyes are daily being opened to their usefulness. China is a great country, and our resources are multitudinous. Men of intellect and brilliant talent, capable of learning and doing anything they please, are not lacking; but their movements

have hitherto been hampered by old prejudices which have formed a bar in thinking out and introducing to practical use new inventions. Now that we have entered upon the highroad toward the education and enlightenment of the masses for the purpose of making our Empire strong and wealthy like other nations, our first duty should be the encouragement and employment of men of genius and talent. We therefore hereby command that from henceforth, if there be any subject of ours who should write a useful book on new subjects, or who should invent any new design in machinery, or any useful work of art and science which will be of benefit to the country at large, he shall be honored and rewarded by us in order to serve as an encouragement and exhortation to others of similar genius and talent. Or, if it be found that such geniuses have real ability to become officials, we will appoint them to posts as a reward, or grant them decorations or fine raiment in order to show the masses the persons who have gained honor by their talents and genius; while they shall also be allowed to enjoy the fruits of their labors by being presented with papers empowering them to be the sole manufacturers and sellers within a certain limit of time. Again, to such as have administrative talents and the necessary funds either to build schools, or begin irrigation works for the benefit of agriculture, or build rifle factories or cannon foundries, all of which will be of great benefit to the population of the Empire at large, shall be granted rewards on the same scale as men who have gained distinction in the army or navy, in order to give them special encouragement to work for the good of themselves and their country. We hereby further command the Tsungli Yamên to draw up the regulations which shall govern the various matters noted within this edict, and report at once to us.

RUSSIA IN THE CHINESE MARKETS.

In recent reports which I had the honor to submit to the Department, special attention was invited to the manner in which Dutch (Java) and Russian (Batum) oils are crowding out our American kerosene from the great markets of the densely populated Empire of China, and I pointed out the advantage which our Dutch rival has in the important matter of freight, the sources of supply being much nearer China than our American petroleum wells. I now beg to respectfully draw the attention of our people at home, who are interested in the important matter of American trade, in addition to the points to which I referred in my reports on American oil in China, to another and very grave menace with which our trade in China will probably soon be threatened. It is the system by which Russian merchants will undoubtedly seek to expand their trade with the Celestial Empire as soon as through railroad communication is completely established between Russia in Europe and China via Siberia and Manchuria.

It must interest and concern our American manufacturers and exporters to note the extension of the Russian efforts to obtain territorial concessions from China, and their possible effect on American trade in the Chinese Empire. The importance of this question to our manufacturers and the gravity of the issues involved

are made clearer by a retrospective view of Russia's action in other parts of Asia where the Russian merchants have had to meet British competitors. Russia's success in Central Asia in pushing her products ahead of her rivals will undoubtedly be repeated in China, with a result serious to us where our trade interests clash with hers in cotton goods, kerosene, and flour. The Russian system will be applied in China to all rivals in trade, when the through railroad line enables Moscow manufacturers and merchants to pour their products into the Empire of China on terms and under conditions which Russians will be in a position to fix as they please.

It is obvious that Russia's policy is not only the acquisition of an ice-free seaport like Port Arthur or Talienwan; she has, for fifty years or more, been planning to capture the rich markets of this vast Chinese Empire, and to accomplish this, it was necessary to run a railroad through Siberia to a convenient seacoast port open all the year. The concessions granted by China under the convention of 1895 were merely stepping-stones for the Muscovite trader to reach richer markets. It appears from the published text of the agreement which the Chinese Government is alleged to have made with the Russo-Chinese Bank, that the Chinese have bound themselves to charge one-third less import duty on all Russian goods entering China through Manchuria, than is paid on similar products from other foreign countries landed at a Chinese port.

Export duties are to be reduced one-third in favor of Russia. All Russian manufactured goods intended for the Chinese markets are to be charged lower transit dues than those shipped from non-Russian ports. Such an arrangement for the preferential treatment of Russia's trade would prove a serious matter for American manufacturers and merchants in the markets of the Far East and would deal a heavy blow at American commerce.

The methods Russia has successfully applied in cutting into British commerce in other parts of Asia will, it is to be presumed, be employed in China. Reasoning by analogy, we may profit by reference to the records of British and Russian trade in Khorassan and northeastern Persia. The commercial reports dealing with the foreign trade of Persia show how effectively the Russians can kill trade in products of which they desire to secure a monopoly in oriental markets, where a dangerous competitor has obtained a footing. The British trade journals have admitted the fact that long-established business in Manchester piece goods has been ruined by the Russians, not by means of preferential rates for Russian merchants or lower import duties or similar acts of violation of treaty rights to which exception could be taken, but by a rebate on Russian imported cotton goods. On every pound of manufactured Russian cotton or

other goods sent into Persia, the Moscow manufacturer and merchant receives an allowance from the Government of an amount equal to 3 half-pence (sound money), which is more than sufficient to cover the cost of freight (amounting to just a half-penny per pound), leaving a penny per pound profit in freight beside the usual profit on their goods. This rebate is, in fact, a bounty paid to the Russian mill owner and merchant amounting to over $3,000,000 annually, which has as effectively killed the trade in British cotton goods in Persia as the grant to continental beet-sugar manufacturers has ruined the industry of the West India sugar-cane planters. The Russian bounty system has been applied in Central Asia and adjoining frontier lands, with the result that no foreign product which Russia produces has been able to hold its own in the Eastern markets accessible to Russia or within her "sphere of influence." Competition has been killed by the device of a countervailing grant or bounty in aid of Russia's industry. Of course, this rebate or bounty system of Russia does not come under the head of preferential duties, but it works wonders for Russian trade. Why not help our American trade by similar means?

The Russian method, if enforced in China, will surely injure our trade in oil, flour, piece goods, and other products we send to China, when once the Russians have completed their railway across Siberia and are in a position to supply the Chinese markets with products of their own European factories. The system of Russian bounty will seriously affect our American kerosene interests, when it is extended to oil-tank trains through Siberia and Manchuria, bringing millions of gallons of the Russian (Batum) petroleum to China. We will, of course, hold a portion of the trade, owing to the superiority of our American kerosene, which is so popular that the agents of the Russian and Dutch oils put up their goods in imitation of, and even brand and label it as, genuine American kerosene. This counterfeiting, imitating, and false labeling in China is not confined to unscrupulous people in the oil business, but immense quantities of goods "made in Germany" and also from Belgium, and "Fairbanks" scales made in Osaka, Japan, are sent to China and palmed off as American products.

EDWARD BEDLOE,
Consul.

CANTON, *June 15, 1898.*

BELGIAN ENTERPRISE IN CHINA.

As a neutral nation, Belgium must refrain from all entangling military alliances. Commercially and economically, however, she is most enterprising, and this industrial activity is now threatening to create unforeseen complications.

The existing controversy between England and Russia over the Pekin-Hankau or Chinese Grand Central Railway brings Belgium prominently into notice. It will be remembered that this railway is a Belgian project, planned by Belgians and to be constructed under Belgian management. For many years past, progressive Chinese statesmen have wished for the construction of a railway line to unite Pekin and Canton. The completion of a line to Hankau, halfway between Pekin and Canton, would not only be of greatest commercial significance, but of no little strategic importance. China failed to find at home the men and funds necessary for this enterprise, and in turning to Europe, the Imperial Government naturally preferred to negotiate with the nation which would be least likely to consider the construction of the railway an opportunity for conquest or political advantage. Thus, the choice fell upon Belgium, a neutral state. After long negotiations on the part of its minister at Pekin and the active support of the Brussels Government, the contract was awarded to a Belgian syndicate to build the line from Pekin to Hankau, a distance of about 780 miles.

To obtain funds, however, the Belgian Syndicate entered into an agreement with French capitalists. A Chinese loan of $21,712,500 at 5 per cent is to be made, the capital to be supplied as rapidly as the work of construction advances. It was further agreed that the Russo-Chinese Bank was to act as financial agent. Subsequent developments would tend to show that the greater portion of the money has been, or will be, subscribed by Russian capitalists and the balance in great part by French. Here is the occasion of England's protest.

Presuming that all pending differences are amicably settled and the original contract is executed, the Belgian company is to operate the line. The board of managers is to be at least two-thirds French or Belgian; the other third may be Chinese. The material is to be ordered as far as possible in equal proportions from French and Belgian firms; the line is to be completed in 1903. Of the first issue of $7,720,000 of the loan, French banks take three-fifths and the Belgian banks the other two-fifths.

The Chinese Government is represented in Great Britain and

Belgium by the same ambassador. During a recent visit in Brussels, this personage was interviewed relative to the Pekin-Hankau Railway. He is reported to have expressed himself very favorably to the Belgians. He emphasized the fact that Belgium had gained the preference because of its neutrality and on account of its vast resources and facilities in turning out railway material and supplies.

One fact is certain—the success of this enterprise will assure to Belgium considerable influence in the East. It will open up directly an immense market for its metallurgical industries and indirectly a new field for the greater portion of the other numerous products of its skill.

HENRY C. MORRIS,
Consul.

GHENT, *August 30, 1898.*

THE PEKIN-HANKAU RAILWAY CONTRACT.

Consul-General Goodnow sends from Shanghai, under date of July 28, 1898, the text of the contract recently made between the director-general of the Chinese railways and the Belgian Syndicate, for the construction of a railroad from Lou-kou-chiao to Hankau. The chief articles of the contract are given below:

(1) The Tsungli Yamên must officially notify the Belgian minister in Pekin of the imperial decree received by their excellencies the viceroys of Pechili and of Hu-Kwang the 14th day of the ninth month of the twenty-second year of Kwang-Hsu (October 20, 1896), authorizing the contracting of a foreign loan for the construction of a railway from Lou-kou-chiao (near Pekin) to Hankau.

(2) The Imperial Chinese Government places the general direction of this enterprise in the hands of His Excellency Sheng-ta-yen.

(3) The director-general of railways, Sheng-ta-yen, and M. Hubert, the representative of the Belgian Syndicate, undertake the construction of the said railway, after an understanding has been come to regarding the present definite contract under the conditions following:

ARTICLE 1. A copy of the imperial decree of the 20th of October, 1896, is to be attached to the present contract. The decree authorizes the General Railway Company to undertake the construction of the Lu-Han line, which covers a distance of about 1,300 kilometers.

The General Company having already a capital of 13,000,000 taels,* His Majesty the Emperor informs the viceroys of Pechili and of Hu-Kwang that the Director-General Sheng-ta-yen has contracted a European loan for the purpose of completing its construction. Herewith the résumé of the imperial decree:

"Upon the proposition of the viceroys of Pechili and of Hu-Kwang, a general company has been formed to construct a railway between Lou-kou-chiao and Hankau, and a loan has been contracted in Europe by this company for the purpose of completing the enterprise.

* The value of the haikwan tael, July 1, 1898, was estimated by the United States Director of the Mint at 68.8 cents.

"The expectant official of the fourth class, Sheng Chuang-Houai, is nominated the head of this company under the title of superintendent of railways."

As a result, the viceroys of Pechili and of Hu-Kwang, with Sheng-ta-yen, in conformity with the imperial decree, decided to negotiate a foreign loan with interest at 5 per cent. This loan of 112,500,000 francs ($21,712,500), corresponding to £4,500,000, as stipulated in the preceding contract signed at Wuchang, will take the name of "the 5 per cent Chinese railway loan of 1898."

ART. 2. This loan is to be divided into 225,000 parts or scrip of 500 francs each

* * * * * * *

ART. 5. China can not repay, wholly or in part, the capital borrowed, before 1907; but after 1907 the repayments can be made at any moment, and, once that a repayment has been made, the present contract is entirely nullified.

ART. 6. The Belgian Syndicate will designate the place in Europe where they will make the payments of interest to facilitate the repayment of scrip. These payments will be made in francs. The Belgian Syndicate will equitably designate the bankers who are charged with the payment and issue of scrip.

ART. 7. The payments of interest and the return of the scrip are authorized by the Imperial Government and will be made previous to all other payments. The income of the said railway, after deducting working expenses and improvements, will be devoted at first to the use of the loan. * * *

ART. 8. Upon the commencement of the said railway, the net proceeds are to be remitted by the General Company to the Belgian Syndicate, in order that they may be deposited in the Central Bank of Brussels or the one designated by the latter. The bank must immediately convert this deposit into gold to the advantage and profit of the General Company, sufficient to pay interest and capital for the following six months in such manner that each payment is to be taken three months in advance. * * *

ART. 9. The bank which receives the deposit of sums accruing from the loan can take from this deposit, during the period of construction of the line, the necessary sums for effecting the payment of the half-yearly interest, without the necessity of a special authorization to this effect.

ART. 10. The General Company, in order to show its solvency and good faith, consents to give to the Belgian Syndicate, under the form of a chief guaranty, the railway line from Lu-kou-chiao to Hankau with the rolling stock and lines of improvement. The Belgian Syndicate engages to accept, in the name of the capitalists, the said guaranty. Should the said General Company be unable to fulfill its engagements relative to the payment of interest and the repayment of capital, or if the Belgian Syndicate replaces it with another syndicate, the capitalists can deal in an effective manner with the guaranty in order to protect their interests.

ART. 11. The guaranty mentioned in article 10 can not destroy the effect of the conditions contained in article 7. * * *

ART. 12. The bank in question must every six months have already in hand the payment to be effected the six months following. It must take from the depot the necessary sums for remitting to the bank charged with the payments.

ART. 13. The bank charged with the duty of payment of interest and of capital redeemable by regular drawings or by forestalling repayments, receives a commission of 0.25 per cent—that is to say, £25 for £10,000. This commission will be paid out of the general expenses of the works. In the case of a deficiency, China will complete the sum.

ART. 14. China consents to authorize, in conformity with article 9 of the present contract, as far as she possibly can, the issue of these scrip. Therefore, all the scrip and coupons with interest, as well as the movement of the funds provided in the said loan, are exempt from all taxation, in order to facilitate the enterprise.

ART. 15. The interest on scrip which has not been touched at the end of five

years will go to the account of China, as well as scrip whose numbers have been drawn by lot, of which repayment has not been demanded during a period of thirty years. The scrip the possessors of which have died becomes the property of their heirs, in accordance with the law of the country of the deceased. The payments of interest and of capital must be made regularly, without distinction as to the condition of the country and whether the holder of scrip is a friend or an enemy. In case of scrip being stolen, lost, or destroyed, the holder can make a declaration to the General Company, who will deliver him new scrip if proof is presented.

ART. 16. The Tsungli Yamên are to telegraph to the Chinese minister to notify the Brussels and Paris markets of the loan authorized by the Imperial Government, in order that the scrip may be quoted on the said markets.

ART. 17. Of the present loan of 112,500,000 francs ($21,712,500), the Belgian Syndicate will immediately purchase for 39,000,000 francs ($7,527,000) 78,000 scrip at 500 francs each. This sale purchase has been accepted with a discount of 10 per cent—that is to say, for a sum of 35,100,000 francs only. Interest on this 39,000,000 francs will be paid to the section of depots in accordance with article 18 following.

ART. 18. The Belgian Syndicate will deposit with the Russo-Chinese Bank in Shanghai a first installment of 8,600,000 francs of the 39,000,000 francs. The balance will be transmitted to a bank designated by common accord by Sheng-ta-yen and the Belgian Syndicate, after which the Russo-Chinese Bank in Paris will receive the 78,000 scrip, which is the first object. The other 147,000 scrip will also be deposited in the same bank. The Russo-Chinese Bank and the other bank to be finally designated will place the moneys deposited at the disposition of the General Company. The method of payment is stipulated in article 20 following. The bank will pay interest on the sums deposited, which will be to the profit and advantage of the General Company.

ART. 19. The General Company has already a capital of 13,000,000 taels. As the Lou-Han line must be first completed on one side by the trunk line of Lou-kou-chiao to Pao-ting-fu—145 kilometers (90 miles)—and on the other side by the trunk line of Hankau to Sing-yeng—247 kilometers (158.4 miles)—the General Company will immediately proceed with the construction of these two trunk lines, and with its capital of 13,000,000 taels will furnish all the material for construction and rolling stock for the beginning of the trunk lines. Excepting the trunk line of Lao-kou-chiao to Pao-ting-fu, the construction of the entire Lou-Han line will be given by the General Company to the representative of the Belgian Syndicate, who, acting for the General Company, will undertake the direction, supervise the construction, survey, make plans and estimates, undertake the work, order the ballast and materials for its carrying out. All the plans, estimates, projects, etc., must be submitted for approbation by the superintendent of the General Company. Excepting purchases made in Europe, which are paid directly by draft, all the expenses of the work, including transportation, etc., of the European staff engaged by the Belgian Syndicate on account of the General Company, will be paid by the latter, in order that the Belgian Syndicate will have no expenses to pay, and that it may devote all its efforts exclusively to forwarding the work of the railway, which must be completed throughout the entire line within three years.

ART. 20. For the work on the Hankau–Sing-yeng and Sing-yeng–Pao-ting-fu trunk lines, the Russo-Chinese Bank and the other banks to be mentioned later must pay monthly to the General Company such sums as are necessary for its construction and expenses. These sums must be appraised in advance by the Belgian Syndicate or by its representative. * * * The profit from the sale of scrip being destined exclusively for the construction of the railway line from Hankau to Pao-ting-fu, the banks can therefore suspend payment if they discover that a single cent of this money has been diverted to other purposes, or that the General Company refuses to

further authorize the Belgian engineers to direct the construction thereof. Should this construction not absorb the entire amount of the loan, the surplus will be returned to the General Company.

ART. 21. The Belgian Syndicate engages to purchase, previous to the end of the year 1901, the remainder of the scrip for the sum of 73,500,000 francs ($14,185,500), of which the remittance will be made to 90 per cent, with interest to cast up. This purchase can be made in one or more installments, but each purchase must not be less than the actual sum of 25,000,000 francs ($4,825,000). These operations are made legal by the Russo-Chinese Bank in Paris, to which the General Company will give its orders within a period of one month after advice of the purchase has been noted. The product of these purchases will be legally deposited in a bank designated by mutual agreement. The bank will make payments comformably with the stipulations of article 20.

ART. 22. The Belgian Syndicate will have to come to an understanding with the General Company before each operation of this nature, as to the method of using the money raised by the scrip; that is to say, the choice of the line to be constructed with this money.

ART. 23. Starting with the signature of the present contract, all the expenses of survey will be paid by the General Company. * * *

ART. 24. The scrip, of which the Belgian Syndicate has been intrusted with the sale, can be subscribed to the extent of 78,000 numbers. In this case, the General Company, following the telegraphic advice of the Belgian Syndicate, can legally sell a number of scrip above 78,000 numerals under the same conditions as those preceding; but notwithstanding the present article, the Belgian Syndicate is not bound to purchase a single number of scrip above the numeral of 78,000.

ART. 25. Excepting the material furnished by the Hanyang iron works, all the material necessary for the construction and exploitation of the Hankau–Pao-ting-fu line will be furnished by the Belgian Syndicate, which engages to render itself worthy of confidence by respecting the clauses of the present contract and in furnishing material of good quality at the lowest prices. With respect to the line from Lou-kou-chiao to Pao-ting-fu, the work must be quickly finished; it will not be taken as the property of the Belgian Syndicate. The material furnished by the Belgian Syndicate is exempted from all tax or likin in China, both at the port of entry and in the interior of the Empire. If the Belgian Syndicate receives advice from the Belgian Government that China can not accord the materials entry free of duty, it will be the duty of the General Company to obtain the necessary delay of one month or else the present contract will be annulled. This contract will be legally nullified in the following cases:

War.

The diminution in value of the French debt (Rente Française) below par value.

If the Belgian Syndicate can not scrupulously carry out the conditions of the present contract, this document will immediately become void and without effect, and in case the General Company immediately takes advantage of its liberty to treat on the same question elsewhere and with other nationalities, it may immediately dismiss the Belgian engineer in chief.

ART. 26. Differences arising between the General Company and the Belgian Syndicate or between the Chinese authorities and the Belgian representative, will be taken up and decided with equity and justice by the Tsungli Yamên or the Belgian minister in Pekin. In a case where both the authorities are unable to come to an understanding, they will choose by common consent a third arbitrator, whose decision will be final.

* * * * * * *

ART. 29. The present contract is done in triplicate: One for the Tsungli Yamên, one for the General Company, and one for the Belgian Syndicate. The French text

will be the true copy in case of dispute. This contract is to be submitted for the approbation of His Majesty the Emperor of China. The Tsungli Yamên will notify the Belgian minister, and, if necessary, the ministers of the country where the circulation of scrip is to be made. The Central Bank of Belgium, in Brussels, and the Russo-Chinese Bank, of which they are cognizant in the present contract, must make their dispositions for the execution of the clauses which interest them. They can not hold any other but a direct interest. The General Company will recognize the responsibility of none but the Belgian Syndicate.

Done in Shanghai the 26th of June, 1898 (eighth day, fifth month, twenty-fourth year of Kwang-Hsu).

SHENG-TA-YEN,
Superintendent of Railways.
HUBERT,
Representative of the Belgian Syndicate.

HINTS FOR EXPORTERS TO CHINA.

The following is a copy of a letter* written by Consul-General Goodnow, at Shanghai, July 16, 1898, in answer to an inquiry from a cotton firm in New Orleans:

American firms handling cotton goods (I speak from memory) here are the American Trading Company, Frazar & Co., China and Japan Trading Company, Cary & Sandford, and Fobes & Co. Most of the business with Shanghai from the United States is carried on by drawing on the purchasers in China, with documents attached. The principal banks doing business with the United States here are the Hongkong and Shanghai Banking Corporation and the Chartered Bank of India, Australia, and China. The rate of exchange is always the rate on the day on which the draft is presented for payment.

I find there are two great obstacles in the way of business with America. In the first place, American firms do not take care to fill the orders exactly. There is somewhat of a feeling at home, "Oh, anything will do for the Chinese." As a matter of fact, there are no people more particular than the Chinese. Their customs and their superstitions must be considered, as well as the things which come into account in other countries. It is a great thing to have a lucky trade-mark. It is above all necessary to handle the goods through a man on the ground, in whom the Chinese have confidence. They do not think anything about the firm at home; they think of the man directly with whom they deal. This man, if he is wise, knows the demands of the trade and caters to it; and, however eccentric some of his directions may seem in ordering, they should be followed to the letter. In the next place, almost all English and German firms have an arrangement by which all claims for damages

* The original has been sent to correspondent.

through faulty packing, etc., are settled very promptly through the arbitration of their consul at the place where the goods are delivered. Most American shipments are made without any such agreement, and the consequence is that should the goods be damaged through faulty packing, etc., the parties interested are so far apart that the local dealer here is forced to stand the loss, rather than to go to the expense of suit or arbitration in America; and the result is that on even terms or at some difference in price he buys his goods from England or Germany. He is willing to pay the higher price for a certainty of a speedy, just, and inexpensive settlement of any damage there may be.

TREATMENT OF MISSIONARIES IN CHINA.

I transmit herewith a translation of an important decree issued by the Emperor and published in the Pekin Gazette on the 14th instant.

The importance of this decree is found in the fact that the Emperor emphasizes the treaty provisions authorizing the promulgation of the Christian religion and forcibly reiterates his instructions to the authorities in the various provinces to see to it that proper protection is accorded to missionaries, and enjoins on local officers to receive missionaries when they ordinarily call upon them.

Such an order, coming from the Emperor, has never before been promulgated. It will serve a good purpose, for missionaries will now be able to make representations direct to the officials concerning their work or their difficulties, and time, trouble, and expense will thereby be saved. It will be observed that action must be taken without loss of time to bring all unsettled cases to a termination, and any lack of energy in this respect by the local authorities is promised effective punishment.

The higher authorities will also be held to account, and none are to be allowed to shift their responsibility to others.

E. H. CONGER,
Minister.

PEKIN, *July 15, 1898.*

TRANSLATION OF A DECREE ISSUED BY THE EMPEROR AND PUBLISHED IN THE PEKIN GAZETTE, JULY 14, 1898.

The propagation of the Christian religion, as practiced in foreign countries, is provided for by treaty stipulations. We have repeatedly issued our instructions to the viceroys and governors of the various provinces to see that satisfactory protection is accorded to missionaries, in the hope that the people and the Christians may live peaceably together.

But during the present year, the missionary case at Chiang Pei Ting, in Szechuan,

and the cases at other places have not, as yet, been settled. In the province of Kwang Si, at Yung An Chou, another case of murder of native Christians has occurred. At Shashih, in Hupeh, a case has also occurred in which foreigners are involved. In a word, the local authorities have not been able to show their respectful indebtedness to us and carry out the specific injunctions which we have solemnly enjoined upon them; and whenever cases have arisen involving Christians and non-Christians, if they have not been careless and given no attention to them, then they have been laboring under the idea that these are outside matters. They have not exerted their influence for good, and any ill feeling existing among the people against Christians has easily led to trouble.

It is not strange, then, that missionary troubles are occurring more and more often. The high authorities of all the provinces are now specially commanded that, whenever missionary cases occur, they must particularly instruct the local officers to act in good earnest to give proper protection; and whenever missionaries wish to call upon the local officials, these must not of their own free will and accord cut off, or decline to have, communication with them. Such intercourse will lead to mutual trust, good faith, and confidence. The native Christians will then not cause trouble, and the people will be admonished that they must not for trifling reasons create disturbances. In the event of a sudden uprising among the people, if the officials of the place deal with the matter on an impartial and equitable basis, it will not be a matter of difficulty to prevent a calamity before it has actually broken out.

The tartar generals, viceroys, and governors, therefore, must strenuously instruct the officers under their respective jurisdictions, that as occasion arises they are to satisfactorily and carefully devise a plan of action in the premises.

As to the cases still remaining unsettled, let such action be taken as is necessary to bring them to a settlement without loss of time and as in future will prevent missionary troubles again occurring.

Should there be any lack of energy shown in taking precautionary measures to prevent trouble, the delinquent officials will be severely punished in accordance with the new rules framed and submitted to us by the Yamên of Foreign Affairs.

The tartar generals, viceroys, and governors, also, will not be allowed in such cases to shift the responsibility imposed on them upon anyone else.

We will administer and uphold the law in the discharge of our duty, and let it not be said by the officials that they were not duly cautioned beforehand.

This decree is promulgated for the information of the public.

OFFICIAL NEWSPAPER IN CHINA.

The Emperor, continuing his efforts in the matter of making reforms, issued a decree on the 26th instant ordering that the "Shih-Wu-Pao," or Chinese Daily Progress—a paper published in Shanghai—should be made an official organ.

The suggestion was made by the Assistant Grand Secretary, Sun-Chia-Nai, chancellor of the new National University of Pekin, who some time ago memorialized His Majesty on the subject. Mr. K'ang-Yu-Wei, a man of considerable literary attainments, and who was nominated and appointed a secretary of the Tsungli Yamên, is to be the manager of the paper.

A copy of every publication of the paper is to be presented to the Emperor for his perusal. Copies of each of the Chinese papers published in Tientsin, Shanghai, Hankau, and Canton are also to be transmitted to the court of censors and the National University by the viceroys or governors of the provinces. Important articles on current affairs must be marked, and the paper presented to the Emperor by the censorate or chancellor of the university.

His Majesty says that acquisition of an extended knowledge of affairs, both Chinese and foreign, is the main object he has in view, and he enjoins upon the editor of the paper to publish the truth regarding daily events. Articles that may seem to be displeasing to His Majesty must not on that account be suppressed.

The action taken by the Emperor meets with general approval among the progressive element of the Chinese, an element that must eventually rule the destinies of this great Empire.

E. H. CONGER,
Minister.

PEKIN, *July 28, 1898.*

EDUCATIONAL INSTITUTIONS AND METHODS IN KOREA.

The education of Korean children is usually carried on at home. Several families may unite and employ a teacher, who will instruct the boys in the use of the Chinese character and in the principles of the Chinese classics. Well-to-do fathers usually provide their boys with a private tutor. Girls are not usually taught to read. Of late the publication of numerous papers, periodicals, and religious pamphlets in the native character called "ernmoun" is aiding in the spread of a knowledge of the Korean language, which is much easier to learn and more expressive than the cumbersome Chinese, which latter all officials must know, since the Chinese is used in all official documents.

I inclose a clipping from the Seoul Independent of July 5, relating to the general system of education now being followed in Korea. Through the kindness of the various foreign teachers, I am able to give an intelligent account of the work the foreign schools are doing.

In 1883, an English school was started in Seoul, under the care of an Englishman, T. E. Halifax. The school was kept running for a couple of years, but the chief work was done in the eight months prior to the bloody émeute of 1884. Most of the really first-class interpreters now in Government employ were pupils in this school and got their knowledge of English during this period of eight months. The Koreans are very quick in acquiring a knowledge of foreign languages.

In 1886, a school was started in Seoul under the charge of three teachers selected by the Department of the Interior at the request of the State Department of the United States, in accordance with repeated requests from the Korean Government. These gentlemen—Messrs. Gilmore, Hulburt, and Bunker—served in this capacity for varying periods till the school finally closed, in 1894. Some of their former pupils now hold positions of trust and importance in the Korean Government. The school did good work in a small way, but did not accomplish what was expected of it, owing to great opposition from certain quarters to anything of the kind at the time.

The present favorable aspect of education in Korea really dates from the Japan-China war, and I shall mention the schools separately, using the information given me by the respective teachers.

AMERICAN METHODIST SCHOOL.

The mission of the American Methodist Church maintains a flourishing school, which was originally started in 1886 under the name of Pai Chai "Hall for Rearing Useful Men," a name conferred upon the school by His Majesty. Under an agreement made with the Korean Government in 1896, a certain number of pupils are placed in this school by the Government upon a compensation of $1 silver (50 cents gold) per month. The Government further pays for a native teacher for every 50 scholars. The course of study, discipline, etc., is entirely in the hands of the mission. Attendance at chapel and at Sunday service is compulsory. From an attendance of 50 in 1895, the school has now 103 pupils; and 176 were in attendance at the close of last year's term—June, 1897. Japanese and Chinese youths are also received at this school. The school has 2 foreign teachers and 4 native assistants, with 3 instructors in the Chinese character. A very highly appreciated course of lectures has been a prominent feature during the past two years, being delivered by native-born Koreans who have lived long abroad and become thoroughly familiar with matters that interest the outside world. No money is given to any of the pupils of this school except for services rendered. Poor boys are given employment in the mission printing press, or bookbindery, and they thus learn a useful trade while helping themselves to a general education. A theological course was at one time furnished at this school, but it has been discontinued. The boys wear a uniform, and they have some drill in gymnastics and military tactics. One prominent feature of this school is the debating society, in which the boys have shown a remarkable aptitude for public speaking. From the course of study sent me by the principal, Rev. H. G. Appenzeller, I find that the preparatory course extends over three years. Reading, writing, and

spelling are taught in the first year; geography, arithmetic, and composition in the second; and history, algebra, drawing, physiology, and a course in the New Testament in the third. This is followed by a regular college course, which is only arranged for, however, through the sophomore year.

NORMAL SCHOOL.

Seoul has another American school, taught by Rev H. B. Hulburt, one of the three teachers sent from America in 1886. Mr. Hulburt's present school was started in 1897. It is meant to be a normal school for the drilling of native teachers, who may go out and take charge of primary schools for the people. It was the idea of the Government in starting this school to use the teachers prepared in it for establishing a regular system of public schools throughout the country. One of Mr. Hulburt's functions is to prepare text books for the use of these schools, a work in which he has had considerable experience. It is unfortunate that in connection with this normal school the Government has established a school for the teaching of English to the sons of nobles, thus preventing the teacher from devoting his time to his legitimate work, as he desires to do. There are at present enrolled in the normal school 30 scholars, while the English school under the same teacher has 35 students. The principal has 1 native assistant in the English department at a salary of $20 silver ($10 gold) per month, and 2 assistants in the normal department who receive $42 ($21) and $20 ($10), respectively. The last two teach only the Chinese classics. As to the work, Mr. Hulburt says:

> My work being, then, of a double nature and the assistance of little value, I found it necessary to confine the curriculum for the first year to arithmetic and general geography. During the first year the men completed and thoroughly reviewed the whole of an intermediate arithmetic, the application of every part of which I adapted to Korean life and customs. This, in view of the utter lack of textbooks, is most encouraging and shows that the Koreans have good capacity along scientific lines. I found among the whole class three or four men who are exceptional mathematicians, even when judged from the standards of America or Europe. In the study of geography, I found that the interest was sustained, and the men applied themselves vigorously. The difficulty in the pronunciation of foreign names and the fact that the Chinese books have transliterated the geographical names in such a grotesque manner has been something of an obstacle; but in this branch I have made use of a gazetteer of the world which I published some years ago in the vernacular, and in this way I have succeeded in weaning them away from the Chinese pronunciation, which is so misleading. During the first year, the men have completed the study of Europe, Asia, and North America. In addition to ordinary geographical matter, they have been taught the facts concerning the military and naval strength of the different nations, their foreign policy, their relative power, their educational and religious status, and a large amount of other special matter.

I have quoted Mr. Hulburt thus at length, as he is the only one of the teachers who has given me such an insight into the methods and results of teaching the Korean mind. Mr. Hulburt has a five years' contract with the Korean Government, one year of which has passed. His pay is $225 per month for the first year, increasing $25 per month during the second, third, and fourth years, to $300 per month for the fourth and fifth years (equal to half these sums in gold). The school buildings are not at all suited to the work, but will probably be improved. The normal students are housed and fed by the Government at an expense of $5 ($2.50 in gold) per month each. The English students are given their midday meal.

GOVERNMENT JAPANESE SCHOOL.

The Government Japanese Language School (Nichigo Gakko) was organized in 1891 to teach the Japanese language, geography, history, political economy, and "the popular sciences." It has a course of study extending over three years. There have been 11 graduates from this school, which now has an enrollment of 61. Text-books, stationery, and the midday lunch are provided by the Government. Uniforms are not provided, though there is instruction furnished in military gymnastics. The buildings are foreign adaptions of Korean houses and have three class rooms, one dining room, and one office, making a total of 1,440 square feet of space with a playground of 10,800 square feet. The school has a Japanese head master, an assistant master (Japanese), and 2 Korean assistant teachers. The assistant teachers get $300 and $240 silver per annum. The head master receives a salary of $1,500 and the assistant master receives $480 per annum (equal in gold to one-half these sums).

PRIVATE JAPANESE SCHOOL.

The Foreign Education Society of Japan also maintains a school in Seoul, called the "Keijo Gakko." This was organized in April, 1898, "as a token of the sincere sympathy for the lack of a sound educational basis in Korea, with the view of giving a thorough elementary course of instruction to Korean youths, and thus aiming to form a true foundation of the undisputed independence of that country. Among the active members of the society are Messrs. Oshi-kawa and Hondo, most prominent Christians in Japan, and the teachers in charge of the school are graduates of the Kyoto Doshisha School. It is supported by the voluntary contributions of philanthropists resident in Japan and Korea. It endeavors to teach all popular sciences both in Japanese and Korean." This school has two ordinary courses—higher and lower—of three years each and a special course of one year for the teaching of the Japanese language.

There are 4 teachers, who receive only the actual cost of their living. The cost of the maintenance of the school is $3,000 silver ($1,500 gold). The school building is a Korean house remodeled, with five class rooms and quarters for the head master. No charge is made upon the pupils, who are also furnished with text-books and stationery free. Three dollars per month is given to meritorious students, and the best scholar is sent to Japan for further education at the expense of the school. The enrollment is 180, with a daily attendance of 100. No uniforms are supplied or worn.

CHINESE SCHOOL.

On May 1, 1897, the Korean Government engaged a Chinese teacher from Pekin at a salary of $70 per month for the first year, $80 per month for the second, and $90 per month for the third, to teach a Chinese school, with the object of turning out good Chinese interpreters and giving them a knowledge of the Chinese literature and classics. The school has a daily attendance of 35. The age of the pupils varies from 15 to 30. A school building and residence for the teacher is furnished, and the cost of maintenance, aside from the teacher's salary, is $100 per month. The scholars are given 5 cents per day for lunch. The students are divided into three classes, and school lasts from 9 a. m. to 3 p. m., with one hour for lunch. There is no session on Saturday afternoon or on Sunday.

RUSSIAN SCHOOL.

From the Russian teacher, Mr. Birukoff, I have the following facts regarding the Russian Language School. This school was established in April, 1896, and numbers at present 88 pupils. These are selected now and then by the Educational Department, family influence having much to do in the selection. Pupils receive 5 cents per day for a midday lunch. The foreign teacher receives $180 silver per month, with house, and at present he also has $40 extra per month for drilling the scholars during recreation hours. He has 3 assistants (natives), 1 especially engaged and 2 who have been selected from the best of the pupils. The first receives $15 per month, the second and third $10 each. No pupils will be graduated prior to January, 1899. The school has at present four courses, but this number is arbitrary and may depend upon the number of pupils and their progress during the year.

As a rule, the Korean pupils show a special interest in geography and history and very good aptitude for mathematics. They write well, as far as orthography is concerned, but syntax is rather feeble. The greatest nuisance is the abominable pronunciation of Russian words, which sometimes makes the speech of even the best pupils nearly unintelligible.

FRENCH SCHOOL.

One of the most successful schools in Seoul is the French school under Mr. E. Martel, although it has only been in fair running order since January, 1896. French interpreters are met with at all Government departments and at the homes of many high officials. At the commencement of this school, it only had an enrollment of 17 pupils, none of whom knew any French. The number of pupils has steadily increased, until it now has 100 in attendance, with 4 assistant teachers, chosen from the first class. The plan of this school is to turn out good interpreters and teachers of the French language, and at the same time to give them a working knowledge of arithmetic, history, geography, and bookkeeping, so that they may be fitted for the posts of clerks and assistants in the Government. The final examination for this year, which has just been held, covered the following branches: Reading, dictation, arithmetical problems, composition, chartography, oral geography, grammar and parsing, conversation and translation, commercial bookkeeping, and geometry. The cost of maintenance, in silver, is as follows: One assistant teacher, $20 per month; 3 assistant teachers, $15 per month each; 2 servants, $4 per month each; and the scholars are furnished stationery and a midday lunch. The allowance for 1896 was $800 ($400 gold); for 1897, $2,026 ($1,013 gold); and for 1898 it is $2,200 ($1,100 gold).

ENGLISH SCHOOL.

The most important of the foreign-language schools and the one with the best equipment is the English school. The head master, W. Du Flon Hutchison, is a professional teacher of much experience, and he has as assistant master T. E. Halifax, who taught the first English school in Korea in 1883. The school was begun in November, 1894, using as a nucleus some students from a naval school Mr. Hutchison had been conducting with the aid of some English officers on the Island of Kang Wha. The British residents have done a great deal in the way of encouraging the scholars of this school by contributing toward the purchase of neat and appropriate uniforms, teaching them such games as football and other college sports, in which the boys do excellently, and in offering prizes for the winners in the various sports. The boys now buy their own uniforms, which consist of a Norfolk blouse of dark-blue navy serge and well-lined trousers to match for winter; while in summer the same style is used with brown khaki as the material. The boys wear a flat cap, which compels them to cut off the absurd topknot, such as has been worn by their fathers for centuries, and their appearance is thereby greatly improved. It is the plan of this school to give the young

men an idea of general knowledge, in addition to the use of the English language. The masters desire rather to make manly youths of their boys, hoping that they may be induced to continue their studies, or at least have a desire for knowledge greater than they would have otherwise possessed. The school has had many backsets. A fine new building was taken away from them for some other purpose just as it was completed. A drill sergeant loaned to the school by the British admiral was allowed to leave, and they complain of having to work under many difficulties. The scholars of this school are from the middle classes, which probably accounts for much of the school's success; since a teacher, however well qualified he might be, would be able to do little with the nobles' sons unless they were made to obey rules. The pupils receive stationery and lunch, and the cost of maintenance, exclusive of the teachers' salaries, is $4,230 ($2,115 gold) per annum. The teachers receive pay as follows, per month in silver: Head master, $300; assistant master, $250; 1 native teacher at $25, 1 at $20, and 3 at $15 each. There are 120 scholars enrolled in this school, with an average attendance for 1898 of 110.

CATHOLIC MISSION.

Besides the above-named schools, the Catholic mission under the French fathers maintains an important theological seminary here, where men are educated for the ministry. The teaching is in Latin, and a number of native priests of the church have been educated there.

MISCELLANEOUS.

The Methodist, Presbyterian, Catholic, and other missions support schools for little girls, where the children are taught Korean and useful things. These are rather homes than schools.

There have been many military schools in Korea at various times, under the charge of Americans, Japanese, English, and Russians. These have all passed away, and the Koreans have just organized a military school of their own, with no foreign instructors. I understand it is to be more of a school for drilling new officers than anything else. It is the intention to take the tactics and commands they have received from their previous instructors and combine them into an "improvement of each," which will have the Korean language as a medium of communication. It has been a source of comment heretofore that English and Americans, Russians, and Japanese could hear the officers giving commands each in his own language, much to the bewilderment of the native soldier.

A German teacher has just arrived from work in Japan to open a

school in Seoul for teaching the German language. He is under contract for three years, with $200 per month for the first year, $250 for the second, and $300 for the third (silver). He is to have $30 per month also for house rent.

HORACE N. ALLEN,
Consul-General.

SEOUL, *July 12, 1898.*

[From the Seoul Independent, July 5, 1898.]

Besides the foreign-language institutions, there are 10 schools under the care of the Department of Education. Of these, 1 is a normal school with 30 students, whose curriculum consists of reading, composition, arithmetic, geography, history, and dictation. The institution has 2 Korean teachers, 1 receiving $56 and the other $15 a month. Nine are primary schools located throughout the city, with the total enrollment for this year of 838 boys. The course of study adopted in all these schools is composed of reading, composition, arithmetic, geography, history, writing, and gymnastics. Teachers are appointed on the ratio of 1 teacher for every 30 pupils. The monthly salary of a teacher ranges from $15 to $25, according to the term of their service. The annual estimate allowed for these 10 institutions amounts to $14.416.

There are 21 local primary schools stationed in principal centers in the country, each receiving from the Department of Education $30 a month.

While this condition of the primary education is better than nothing, we certainly believe that it can and ought to be improved. The Department of Education we believe to be a farce. All the business it does or pretends to do can be done—and better done, too—by one chief of a bureau and a few able Chusas. But if the farce is to be kept up as a kind of necessary evil in the official system of the Government, let the evil be run as economically as possible by dismissing the majority of the secretaries and Chusas and runners who are paid for doing nothing. The money thus saved should be spent in improving the existing schools and in establishing new ones.

THE FORMOSA TEA TRADE.

More than 75 per cent of all the tea shipped from China to the United States is collected at Amoy, where it is graded, packed, and exported. The volume of the tea and miscellaneous traffic is such that it places Amoy first on the list of cities exporting to America, and it is the seventeenth commercial city in the world.

In 1897, there were shipped to the United States from Amoy 14,742,341 pounds of tea, valued at $2,855,847.30 gold, or nearly $6,000,000 Mexican, in which currency the product is computed here. From all other ports in China and Hongkong, tea was shipped during the first, second, and third quarters of 1897 to the amount of $586,942.99.* The returns for the last quarter of 1897 are not

* According to the returns of the Bureau of Statistics, Treasury Department, the imports of tea into the United States from China during the year 1897 amounted to 51,556,525 pounds, valued at $7,017,921.

available. Of this entire amount, all except 452,939 pounds, valued at $39,561.05, came from a district which, in 1871, shipped no tea worth mentioning and produced but little.

An industry which has had such a signal growth in so brief a period no doubt merits a review. This product, now recognized as the choicest tea grown in the world, is almost entirely consumed in the United States; but the trade has recently been menaced, if not almost ruined, by unscrupulous native dealers, assisted by outsiders, who, by mixing inferior teas with the pure article, were driving the latter from the market, and it was only effectually saved by the creation of the tea commission in the United States, which was given power to supervise the importation of tea, and to reject all unwholesome varieties. The responsible tea merchants of Amoy are unanimous in their indorsement of this move, and it is seldom that a legislative act has been attended with such marked results for good.

The difference in tea arises more from local conditions, soil and climatic influences, than from the species of the plant itself—just as a finer quality of wine is made from the same variety of grape grown in a certain locality than is produced from that variety under different conditions. The old China teas, once famed for many superior qualities, have long since disappeared from the market, excepting, possibly, the Hankau "Congou tea," which now all goes to Russia. In their places, different varieties appear, much more adapted to the American palate, being less stringent, while still retaining all exhilarating qualities.

The Island of Formosa, near the coast of Fukien Province, until 1871 or 1872, had produced but little tea. Through the influence of an American firm doing business in Amoy and elsewhere in China, the governor of Formosa granted to a merchant of Amoy permission to establish a tea plantation on the improved Indian method, for the purpose of teaching the Chinese tea planters new features of the industry. It spread rapidly and became profitable. The quality was found to be better than that grown in the interior of China. Formosan Oolong became the favorite. Almost the entire product went to America, save a small percentage which went to London and was used to blend with the heavier teas, giving them an added flavor and value.

Until the development of the Formosa trade, $2,000,000 (gold) worth of Amoy Oolong came from the interior and sought a market through this port every year. Last year, one man bought the entire crop from the interior, which only amounted to $40,000 Mexican. The tea fields are neglected and most of them are abandoned. The rains have carried the soil from the terraced hills for years, until

they are ruined. I recently made a trip through these old districts, and would give it as my judgment that not more than 30 per cent of the land could be restored under any circumstances, and any restoration would require many years of incessant labor. The tea still grown there is inferior to the Formosan Oolong.

The Amoy merchants gave up their trade with the interior and began to develop the Formosan Oolong because they found that a leaf could be grown on the island which was superior to that grown in other places in the world, and for twenty years they fostered this industry. The consumption rapidly increased. With this came an increase of production in the rich new fields, and prices decreased as a consequence, causing a still more universal adoption of the commodity.

No longer finding a ready market for the coarser varieties of the inland Oolongs, the natives, always clever and ready to play upon either credulity or cupidity if it brings them the reward they seek, shipped their inferior tea to Formosa in native junks, where they blended it with Formosan teas and sold the inferior mixture as Formosan Oolong. Of course, these adulterated teas did not compete with the highest grades; but the bulk of the tea exported does not come under the class of superior grades. The medium grades of the Formosan tea were up to that time as pure as the choicest leaves, but thenceforward they were contaminated with an inferior leaf. The entire benefit derived from the production of the new tea was endangered by the cheaper mixture, which was offered under the same name, but at a lower price, and the Formosa merchants were compelled to resort to the same tactics or go out of business. At this juncture, the new law and the commission with power to reject the blended product came to the relief of legitimate trade; and so effectual has the measure been that, according to good authority, not a pound of the coarser tea is shipped to Formosa for mixing, and all grades of Formosan Oolong go to market absolutely pure.

Americans may be surprised to hear it generally conceded among experts that there is no country in the world where a finer cup of tea can be secured than in the first-class hotels of America and the private houses where an effort is made to properly prepare it; and I have been told by the principal merchants here that but for the timely appearance of the tea commission pure teas would either have been driven from our shores or confined to a high-priced article within the reach of but a small percentage of the present number of consumers.

A. BURLINGAME JOHNSON,
Consul.

AMOY, *July 10, 1898.*
No. 218——7.

PEARLS IN NEW CALEDONIA.

Commercial Agent Wolff writes from Nouméa, under date of August 2, 1898, in regard to the discovery of rich beds of pearl shells off the west coast of the colony. Several weeks back, he says, the representative of an Austrian house arrived in New Caledonia with the intention of monopolizing the industry. A syndicate has also been formed in Paris, with a capital of 1,000,000 francs, to exploit the beds, and has obtained a concession covering 130 miles. Mr. Wolff speaks of the importance of the discovery and his desire that Americans might profit by it, although haste is necessary on account of the enterprise of foreign firms. He incloses a report by the representative of the Paris syndicate, which is summarized as follows:

New Caledonia will soon, it is probable, play an important rôle in the production of pearl shells and pearls. The varieties of shells discovered are: First, the *Avicula margaritifera*, containing a large number of pearls; second, the *Meleagrina margaritifera*, which furnishes a very beautiful white pearl, similar to those found in Tahiti and Gambier; third, a variety commonly called *Epaule de mouton*, of which the mother-of-pearl is magnificent, with many-colored reflections; fourth, still another variety of flat oyster, called *Jambonneau*. The pearl is abundant, generally white, and of a beautiful water. Frequently pink, yellow, gray, and black pearls are found, and large numbers are often found in the same shell. One is cited as containing the fabulous number of 256. To give a just idea of the riches of these seas, a little boat of 1½ tons, furnished, in the year 1897, the enormous quantity of 10 kilograms (22 pounds) of pearls. Up to the present time, and in consequence of the difficulty of procuring divers, the waters have not been sounded to a greater depth than 2 meters (6 feet 7 inches). New apparatus and larger capital will give a great impetus to this industry, permitting soundings of 8, 10, 15, 20, and 25 meters, at which depth the large shells are found.

GLASS INDUSTRY IN JAPAN.*

Consul-General Gowey transmits from Yokohama, August 25, 1898, clippings from the Japan Times of July 20 and August 23, giving information in regard to the glass industry in that country. Mr. Gowey adds that, during the year 1897, the total value of imports into Japan, of glass of all kinds, was $139,649.08. This included window glass valued at $97,618.06, of which $74,150.35 worth came from Belgium and $22,630.78 worth from Great Britain.

The total exports of glassware of all kinds during the same

* This report was made in answer to inquiries from a Michigan firm, to whom Advance Sheets have been sent.

period were valued at $77,912.38. Of this, $53,889.51 worth was sent to Hongkong and China.

The clippings read:

Side by side with the satisfactory development of various lines of industry, the glass-making business is languishing in its preliminary stages. To account for conditions in this line of industry, it is alleged, in the first place, that in Japanese establishments there are no experts or skilled workmen, while the engagement of foreign experts is rendered impossible, owing to the heavy pay required by the latter; secondly, the cost of coal and labor is out of all proportion to the prices of the manufactured article; thirdly, as the result of competition among the factories of small means, proper finish is wanting in the articles produced, so that the market is flooded wtth foreign-made goods.

There are at present several private factories in the capital, where the products are limited to beer and medicine bottles. The Tokyo Glass Factory is the only place where chimneys for use in light-houses, as well as other articles, are manufactured to any extent, but nowhere has the manufacture of window glass yet been started.

* * * * * * *

The depression in the trade has compelled all the lamp-chimney manufacturers in Osaka to suspend business for a month. It has been arranged by the union that each factory shall deposit the sum of 250 yen, which will be forfeited in the event of a breach of the agreement.

AMERICAN BUTTER IN JAPAN.

In reply to a correspondent in Brooklyn, Consul-General Gowey, of Yokohama, has written as follows, under date of July 21, 1898, concerning the butter trade of Japan:*

The imports of butter into Japan for the year 1897 amounted to 136,863 catties, or 182,484 pounds, at a declared value of about $37,500 gold. Of this quantity, the United States furnished 73,000 pounds, France 32,000 pounds, and Austria, Denmark, Germany, Holland, Italy, and Switzerland the rest. The larger quantity imported from the United States comes from California. The average price is about 70 sen per pound, or some 35 cents gold. A small quantity is imported from Canada, and Danish and Dutch brands are quite popular.

The demand for butter is chiefly confined to the foreign population and vessels touching at Japanese ports, and is, of course, somewhat limited. I have no doubt that United States creamery butter, properly prepared for table use and put up in attractive packages in such a manner as to preserve its sweetness and keep it fresh, would speedily control the market.

We have had no trouble in procuring sweet butter from October

---

*Advance Sheets have been sent to the inquirer.

to March or April, but during the rest of the year all butter here seems to become more or less strong and rancid. Butter carefully wrapped in cloth and packed in tins and seemingly sweet when first opened, becomes rancid when exposed to the air. The native output is quite limited.

BUTTER IN PARAGUAY.

Appearances would indicate a promising market for American butter in Paraguay. There is very little of this commodity to be found in this country, although everyone likes it and wants it.

The scarcity may be due to the small number of dairies and factories. There are no butter factories in the country, and all of the dairies are located in the small town of San Bernardino, whose population is almost exclusively German.

During the year 1897 there were introduced about 2,500 pounds, mostly from Italy, coming in pound cans. The small importation would seem to be due to the fact that no attention is paid to the butter trade. The butter produced in the country is retailed for 35 or 40 cents gold per pound.

The duty on imported butter is 50 per cent ad valorem, and the revenue collected from this source last year amounted to $421 gold.

The best butter to be found comes from the German colony at San Bernardino; that which is imported from Europe is very good, but not equal to what is made by our American butter factories. The superior quality of the American butter would insure its rapid sale.

Butter is but little seen on tables generally, and those hotels which use it charge extra for it.

Let any butter manufacturer cater to the whims of the people by placing on their small cans a picture of the President of Paraguay or that of some of the leading statesmen and an old historic house or two, which would catch the eye of the people and cause it to be talked about. This would give popularity to the American brand, and ought to lead to quick and profitable sales. Nothing of this sort exists in the country.

JOHN N. RUFFIN,

ASUNCION, *June 30, 1898.* *Consul.*

THE YUCCA PLANT IN VENEZUELA.

The great staple of Venezuela is coffee; but, as the prices are now very low, it might be well if farmers would turn their attention to other plants which give a more lucrative return. The yucca (cassava) appears to have a great future before it.

This is a very productive plant, and, although well known in Venezuela, no one has yet taken especial pains to develop it.

One hectare (2.471 acres) of land upon which yucca is grown will produce 150 quintals (15,000 pounds) of starch, or 200 quintals (20,000 pounds) of tapioca. The plant is easily and cheaply cultivated. It will stand bad weather, and the dry season does not affect it. It can be raised on any soil.

The yucca will thrive in the same soil with pease, corn, and beans, and ground so utilized becomes far more remunerative than land planted in coffee. One hectare of tilled soil will produce 1,600 coffee plants. Allowing the maximum yield of coffee per plant, a hectare will produce 8 quintals of coffee. On the same ground the yucca will yield 150 quintals of starch, exclusive of other crops, from the same soil. These other crops will aggregate 12 bushels of corn, 12 bushels of pease, and 12 bushels of beans. This will make land in which the yucca is planted from six to seven times as remunerative as when planted in coffee.

Means of cultivation are primitive. Plows and other modern American farming implements are almost unknown here. Some years ago I ordered for a friend some light "Avery" plows; but they have not been used, as neither men nor beasts are trained for them. All the work is done with old-fashioned hoes.

E. H. PLUMACHER,
Consul.

MARACAIBO, *July 12, 1898.*

COMPETITION OF CUBAN SUGAR.

The Brunswick consular district is situated in the center of the beet-sugar producing region of Germany. Believing any information on this important industry, in connection with the relations between Cuba and the United States, would be deemed interesting, I have attached a translation from the Brunswick Landeszeitung, which reads as follows:

Whether Cuba is annexed to the United States or not is unimportant from an economical standpoint. The application of the American customs tariff to Cuba means the free import of Cuban products into the United States. The American sugar interests possess extensive estates in Cuba, and as the need for money has

not grown less in Cuba during the insurrection and the war, it will not be difficult to acquire still greater possessions there. The United States has a demand for sugar of 2,000,000 tons, of which Louisiana supplies 200,000 tons, while 100,000 tons come from beet, sorghum, maple, and other domestic sugar productions. Before the last revolution, the Cuban sugar production amounted to over 1,000,000 tons. It is believed in well-informed sugar circles that Cuba will supply the entire demand of the United States for this article in the course of two or three years. This means, in the first place, the yearly deficiency for the American nation of a round $45,000,000, which the duty on imported sugar has hitherto produced. It means at the same time the destruction of the sugar production of Louisiana, which can not exist without the protection of the duty. The sugar cane can stand no frost; in Cuba there is no frost, but in Louisiana the sugar cane is visited with frost from time to time. We calculate Louisiana sugar to be worth only $80 a ton, so that the omission of the Louisiana production represents a yearly loss of $20,000,000. The Cuban planters and the sugar trust will share the profit which will arise, when Cuban sugar has no duty to pay and is made cheaper for the United States than the sugar of other countries. In addition to this, cane sugar is already worth 1 mark more than beet sugar. In the degree in which Cuba supplies the demand, the United States will cease to buy other cane sugar and beet sugar. Of the latter it has imported 300,000 tons, the rest of the import being cane sugar. The English market has hitherto been the chief customer for beet sugar, England having during the last year consumed over 2,500,000 tons of sugar, of which about 300,000 tons came from Cuba and Puerto Rico. When the United States ceases to buy foreign sugar the whole English demand can be supplied with cane products. Then Europe can realize nothing from her export premiums. It is expected that, by the next harvest, the changed circumstances of Cuba will count for much, as sufficient cane sugar stands in the field to supply 500,000 tons, about double as much as the last harvest supplied.

The writer believes that under the influence of American enterprise the production of sugar in Cuba and Puerto Rico will be enormous, and will cripple the sugar industries of the bounty-paying countries of Europe.

TALBOT J. ALBERT,

BRUNSWICK, *August 28, 1898.* *Consul.*

NATURAL RESOURCES OF SOUTHERN MEXICO.

Consul-General Pollard sends from Monterey, under date of July 27, 1898, newspaper extracts in regard to agriculture in that district. The extracts, which are too long to print in full, are summarized as follows:

Southern Mexico is rich in agricultural resources. Coffee, cocoa, rubber, bananas, rice, sugar cane, pineapples, oranges, lemons, figs—in fact, all the fruits and grains of temperate and torrid zones—can be cultivated and will yield abundant returns. The soil is fertile, well watered, and especially adapted for supporting heavy crops of corn and sugar cane. The great food crop of the country is maize. Two crops of corn and of beans can be raised annually, while vegetables grow the year round.

The climate is one of almost endless summer, but the heat, while oppressive, is less so than the summers of the north.

Dense forests of fine timber cover the coast country. Ebony, walnut, satinwood, rosewood, and several species of oak are shipped to furniture factories and builders of Monterey. Near Ortiz, two sawmills, with a capacity of 50,000 feet per day of ten hours, are employed in getting out railroad ties and mine props. It is calculated that on an average a settler can pay for his land with the profits on the sale of the timber cut in clearing his fields. Besides the common trees, valuable dyewoods, such as the fustic and logwood, are found on the lands bordering on Guatemala and British Honduras; and trees of medicinal virtues, like the quassia, abound, as well as the sarsaparilla root, of which 80,000 pounds were shipped last year from Victoria to New York. An immense tract of land has been granted by the Government to a manufacturing company of Stamford, Conn., for the purpose of cutting and exporting dyewoods. In Monterey, a company has been formed to supply small tracts to men of limited capital. Fifty acres for general farming will keep a small family comfortably, there being practically no winter for which to prepare.

Intending settlers should bring money enough to keep themselves and families for the first year, besides making such payment on the land as may be necessary. This sum is estimated at $600 in gold, or about $1,250 in Mexican currency.

For the culture of fruit, no country presents more inviting features than this, with its fertile land, abundance of water, and cheap labor. Near Montemorelo, one fruit farm, "La Virginia," demonstrates the possibilities of this land from a horticultural point of view. One hundred and twenty-five acres are under orchard cultivation, with 17,000 orange trees and 5,000 peach trees, besides mandarins, grape fruit, Japanese plums, apricots, pears, lemons, olives, grapes, blackberries, and raspberries.

Admirable sites for coffee plantations may be found in the mountains west of the southernmost division of the Monterey and Gulf Railroad. In general, any well-drained slope with a deep, loose soil of sufficient strength and fertility, at least 500 feet above the sea level, can be made into a coffee plantation. In Veracruz, Colima, and Tobasco, coffee grows best at an altitude of from 2,000 to 3,000 feet; and in flavor, aroma, and marketable qualities, this Mexican coffee is said to be equal to any. The trees are raised from the seed, either planted directly where they are to bear or transplanted after a year from the bed. Arranged in rows from 6 to 10 feet apart, from 600 to 1,000 trees are allowed to the acre. The trees commence bearing after four years. Nine pounds of coffee have been harvested from a single tree at Gomez Farias, but from 3 to 5 pounds would be a profitable yield.

With corn, rice, sugar cane, coffee, and cotton, in addition to tropical fruits, the farmer can choose from an endless variety of products. The question of markets is one of vital interest. For staple farm products, such as corn, rice, cotton, and hay, a ready outlet is found at home, while in the interior there is an unlimited opening for firewood, props, and railroad ties. Tropical products command better markets in Europe and the United States, and the low ocean freight rates give the Mexican farmer a great advantage over the Californian. Steamers from Tampico now carry great quantities of produce and manufactures to Yucatan.

The following figures give an idea of the market prices in Mexico: Corn, 50 cents to $1 * per bushel; rice, cleaned, 6 cents per pound at the railway station; beans, 4 cents per pound; coffee (Tampico), 25 to 35 cents per pound; pineapples, 10 to 20 cents each, local markets; Mexican cotton, 4 cents per pound in the seed; Texas cotton, 17 cents per pound; lard, 40 cents, average price, per pound; olive oil, $6 an arroba (4.263 gallons); sarsaparilla root, 8 cents per pound in New York; sugar cane, $4.50 per ton.

* Mexican currency. The Mexican dollar was valued July 1, 1898, by the United States Director of the Mint, at 45.4 cents.

NEW DUTIES IN GUADELOUPE.*

Consul Aymé writes from Guadeloupe, August 24, 1898·

By order of the French Minister for the Colonies, new tariff duties on certain imports went into effect at noon, August 24, 1898, to the great surprise of everyone. The new supplementary schedule is as follows:

Articles.	Quantity.	Duty.	
Alimentary products, grains, etc.	*Kilos.*	*Francs.*†	
Bread and sea biscuit	*100	4 40	$0.67
Corn meal	100	Free.	.....
Corn, whole	100	Free.	.....
Flour	100	4.55	.69
Rice, whole	100	Free.	.....
Animal products.			
Game and fowls	100	20.00	3.03
Lard	100	13.25	2.00
Salt beef, in brine	100	9.33	1.41
Salt pork, in brine	100	10.45	1.58
Smoked meats and tongues	100	12.00	1.82
Turtles	100	20.00	3.03
Colonial products.			
Tobacco:			
Cigars and cigarettes	‡1	12.00	1.82
Cut or powdered	1	6.00	.91
Leaf	100	250.00	37.875

*100 kilograms=220.46 pounds. ‡1 kilogram=2.2046 pounds.

†In United States gold, 1 franc=15.15 cents.

It should be understood that these are the customs duties only. There are quay and statistics duties, octroi de mer, etc. There is an incessant series of fragmentary decrees and rules governing customs, which makes the same exceedingly complicated. The total customs imposts of all kinds are daily increasing in a vain effort to overcome the great annual deficits, and American goods bear by far the heaviest of the burdens, our flour and grains constituting an immense proportion of the necessary imports.

CHARTER PARTIES FOR GUADELOUPE.

In view of the reappearance of American merchant vessels in this port, I would call attention to a certain local custom in regard to the interpretation of charter parties, which results in a loss to the owners of vessels. Nearly all charter parties provide that the freight shall be paid "in American dollars or their equivalent," etc. Further

*See CONSULAR REPORTS No. 217 (October, 1898), p. 245.

provision is made that in similar manner necessary advances shall be made by the consignee to the master. Then follows a clause, "if in francs, at the rate of 5.25 to the dollar."

The only money in circulation here is the paper money of the Banque de la Guadeloupe, and this paper money, as reported by me July 20,* is at a minimum discount of 26 per cent. The official rate of discount is 35 per cent. However, in all commercial transactions the value of coin is thus calculated: One dollar equals 5.25 francs plus 26 per cent. Thus the value is ordinarily stated at 6.62 francs to the dollar.

But, in making advances to masters, the clause "if in francs, at 5.25 to the dollar," which, I have explained, refers to the standard coin franc, is interpreted to mean the depreciated paper franc of this colony. How great a loss results to the master is best shown by an example. An American vessel now here has the above-quoted clause in its charter party. The master is authorized to draw "$200 in American gold or its equivalent." The actual equivalent is 1,323 paper francs. But the consignee, under his interpretation of the clause, gives but 1,050 paper francs, charging them in his account as full-coin francs. The loss is 273 paper francs, or $41.36. In this case, as I have done once or twice previously, I have taken the master's draft on his principals for $200, giving him the full value, or 1,323 paper francs, and he will pay his own bills. This is a round-about way of paying him in full.

To remedy this state of affairs and prevent friction in future, I would suggest that every charter party for Guadeloupe specify that freight is to be paid in American coin or its equivalent, either by approved bill of exchange or, "if in francs, at the rate of 5.25 francs to the dollar, plus the bank rate of exchange at ninety days, if such francs are in paper." Another way would be this: "If in coin francs, at the rate of 5.25 to the dollar; paper francs, at the ruling rate of exchange."

I regret to have to report that the extraordinary interpretation insisted upon is largely due to the opinion of a large American shipper, who claims that "the captain understands the meaning of the clause, and, if he does not, ought to lose." As the loss involved never amounts to less than 2 per cent of the freight earnings, the matter is of some importance. To prevent complications, these further words should close the clause or clauses referring to payments made in the port, "free of all charges, costs, or commissions."

Freighters will do well to see that these clauses are distinctly set forth in charter parties for Guadeloupe.

LOUIS H. AYMÉ,

GUADELOUPE, *August 19, 1898.* *Consul.*

* See CONSULAR REPORTS No. 217 (October, 1898), p. 245.

NEW TARIFF RATES IN SALVADOR.

Consul Jenkins sends from San Salvador, under date of August 11, 1898, copy of a decree of President Gutierrez, affecting duties on imports into Salvador. The principal articles are as follows:

ARTICLE I.

The duties upon imports shall be paid in the following manner:
Twenty per cent United States gold coin.
Twelve per cent United States gold coin for corporations.
Six per cent in silver in bonds of the French debt.

ARTICLE II.

The following articles shall continue paying duties as at present:
Artificial flowers in cotton or other matter not specified.
Baggage is free up to the weight of 100 kilograms per person, when the effects are for personal use; exceeding that weight without invoice shall pay $3 per kilogram.
Barrel staves, arches, and twigs for barrels.
Beers.
Bran (fine) and superfine flour.
Bricks of earth or other material.
Bronze and copper for steeples of churches.
Brooms and brushes of straw and hemp of all classes.
Essences.
Food, comfits, and pastes, chocolates and other sweets.
Food, fruits preserved in spirits.
Food, sugared, of all classes.
Food in vinegar, sago, tapioca, and other paste goods, cocoa, sirups without alcohol, and nuts.
Food of wheat, oats, barley, and all other cereals not specified.
Ginger ale.
Hats, esparto grass, for ladies and children, of whatever other class not specified.
Hats of junco or jipijapa.
Iron cradles, beds, cots, camp stools, sofas, and other articles of furniture.
Leather, dressed sheepskins, hides with hair, and fur robes.
Leather shoes and overshoes of whatever class not specified.
Leather soles for shoes, cowhides, and other leather not specified.
Leather in suspenders.
Leather visors for caps and the like.
Matches of all classes.
Materials for shawls and rebozos, plain, worked, or embroidered.
Pork lard, food and sauces, herring, cod and other fish not further prepared than dried, salted, or smoked.
Pumps, carts, wheelbarrows, pipes, beehives, wood for matches, and wheels for wagons and wheelbarrows, of 100 kilograms.
Silks in shawls and rebozos, plain, worked, or embroidered.
Smelling waters of any kind containing alcohol, such as Florida water or cologne, divina, kanga, lavender, and others of the same class.

Soap (common) without perfume.

Soda or potassium, caustic, for industrial purposes.

Spirits, strong or sweet, as cognac, absinthe, rum, gin, cordials, whisky, rosoli, and others not specified, up to 22° Castier, 59° centigrades, in barrels or other vessel of more than 1 pint. Spirits in ordinary bottles or more or less than 1 pint.

Stearin in mass.

Stearin manufactured in candles and other forms.

Sirups of all classes without alcohol.

Tin plates manufactured in parts, for domestic or other uses.

Tobacco, in leaf.

Tobacco, manufactured into cigars or cigarettes.

Tobacco, in whatever other form not specified.

White or yellow wax.

Wood, embroidery frames, lasts for shoemakers, blocks for hats and wig makers.

Wood for furniture of all classes, with or without marble.

ARTICLE III.

The payment of the five issues of the 10 per cent bonds payable by customs duties is hereby suspended.

This decree, Mr. Jenkins adds, takes effect on all goods coming into the Republic on and after the 1st day of October, 1898. The reduction amounts to 22 per cent on the present rates.

TRADE OF URUGUAY DURING 1897.

Consul Swalm, of Montevideo, under date of July 13, 1898, has sent the Department of State a copy of the annual report of the British consul at Montevideo, Mr. Greenfell. The following extracts are taken from his report:

The total official value of the foreign commerce of the Republic for 1897 amounts to $49,492,305, of which $20,049,980 are imports, showing a balance of trade in favor of Uruguay.

Customs receipts for 1897 have fallen off seriously, amounting to $8,175,442, or $2,424,558 less than those for 1896.

Great Britain has a monopoly of the importation of hams, tea, sacking, felt hats, sheepskins, hoes, rakes, thrashing machines, sewing thread, iron and lead piping, coal, galvanized-iron roof plates, tin plates, soda, jute, iron safes, and gunpowder; and stands first in imports of cotton articles, linen goods, mixed woolen goods, straw hats, linen socks, cotton handkerchiefs, mixed woolen and cotton blankets, windmill machinery, sulphate of copper, spades, carpenters' tools, twine, varnish, iron bands, iron bars and plates, paint, china and porcelain ware, saddlery and harness.

Germany has a monopoly of the importation of pianos, salt and dried codfish; and stands first in imports of refined sugar, flannels, ready-made clothes, cotton and linen shirtings, cuffs and collars, woolen singlets, cotton socks, pure and mixed woolen cloaks, cotton coverlets, towels, napkins, sewing machines, wire fencing, starch, bluing, printing paper, merceries, and house furniture.

France has a monoply in kid skins and tiles, and stands first in woolen goods,

pure and mixed silk stuffs, boots and shoes, cotton singlets, silk neckties, kid gloves, umbrellas, carriage springs, drugs, and perfumery.

Belgium has a monopoly in scythes, iron beams and pillars, zinc plates, and sporting guns; and stands first in mixed linen goods, blankets, plate and looking-glass, table glass, window glass, Roman cement, white paper, and candles.

The United States has a monopoly in plows, pitchforks, and tar; and stands first in timber, reaping machines, binding twine, and axes; second in house furniture, third in sewing machines and sulphate of copper, and fifth in drugs and printing paper.

Mr. Swalm adds:

The trade of Germany, France, and the United States with Uruguay has greatly increased during the past year, largely at the expense of England. The cotton goods imported from the last-named country, especially, show a marked decrease in 1898. Germany has beaten her competitors in cotton and linen shirtings, putting a cheap article on the market. The sewing machines sent by Germany are imitations of American makes.

A copy of the same report has been received by the Department from Minister Finch, under date of Montevideo, June 30, 1898.

INDUSTRIAL CONDITIONS IN HAITI.

The successful prosecution and final results of the late war with Spain have made a profound impression upon the more thoughtful element of the Haitian people. Europeans residing here have been endeavoring to persuade them to seek closer affiliations with the United States. But this advice, coming from quarters whose interest in Haiti is simply what they can get out of the country, does not appeal to the natives as strongly as it otherwise might, although the majority of the Haitians are intense partisans of the United States.

The industrial depression of Haiti has reached such a critical point that the country must soon become a prey to internal disruptions, or to the European government which may have the greatest claim upon it. The currency has become so depreciated as to be well-nigh worthless, and its daily fluctuations seem the result of caprice. Almost all business enterprises are either bankrupt or on the verge of bankruptcy. Business is at a stand-still, and no one, either native or foreigner, is able to see any way out of the difficulty. Such is the condition of a country with a soil the fertility of which probably surpasses that of any other in the world. Everything grows without effort. There are dyewoods and cabinet woods in abundance—even virgin forests of mahogany and other hard woods—and the mineral wealth, though unexplored, is said to be considerable.

I believe a tour of the island, with a view of making a thorough inquiry into its industrial condition, embracing the principal settlements of the interior as well as the cities along the coast, would reveal a field ripe for the investment of American capital. My suggestion would be to visit all the important coast towns, examine into business methods and conditions, and make inquiries of native and foreign business men and neighboring planters, both as to present conditions and future possibilities. I am told that the people of the interior are a simple and industrious peasantry, but are making no headway, owing to the absence of modern improved methods and implements.

I feel sure that such an investigation, if acted on in good faith, would result in immense good to the Island of Haiti, besides securing a field for American capital and commerce.

LEMUEL W. LIVINGSTON,

CAPE HAITIEN, *August 20, 1898.* *Consul.*

As an indication of the trend of popular opinion, Mr. Livingston has inclosed a copy of Le Matin of August 11, a newspaper published at Port au Prince. The following extracts are translated from it:

To-day the United States is, in fact, the sovereign of the American continent, and its will has the force of law in matters wherein it judges it opportune to intervene.

We shall not further enlarge upon the inevitable lot of the neighboring islands and of all European possessions on the American continent. What will become of Haiti? The hour is decisive.

* * * * * * *

It is necessary for the Haitian people to say whether they are not ashamed of their deserted fields and of their cities infested with an undisciplined army, of an always increasing misery, and of civic effeminacy.

* * * * * * *

The interest of the United States is to prove that all the peoples of America can govern themselves, enrich themselves, perfect themselves, without the concurrence of Europe. Her interest is to see all the nations of the New World prosper around her—under her protecting wing, by the power of her capital, and under the inspiration of the new civilization which she is inaugurating. The American spirit will make of the coming generation a people of practical men, intelligent workers, citizens. This American spirit, practical and productive, will revolutionize all the branches of our administration

INDUSTRIAL AND COMMERCIAL ENTERPRISES IN BRITISH COLUMBIA.

TELEGRAPH LINES.

One of the most important improvements in Victoria during the present year has been the extension of the wires of the Western Union Telegraph Company to this point. This line has been in operation since June 9, and has had the effect of cheapening rates and of securing prompt and satisfactory communication with the United States at all times. The Western Union Telegraph Company, being incorporated under the laws of the United States, has no right to operate in Canada, and consequently the line connecting with Port Angeles, Wash., is operated by a company known as the Great Northwestern Telegraph Company, connecting with the Western Union Telegraph Company.

The new line has a cable across Puget Sound, from Seattle to Port Townsend, thence by land to Port Angeles, thence a cable across the straits of Juan de Fuca to Albert Head, and thence by land to Victoria. The result has been of great advantage in communicating with the United States, especially to the great American newspapers, which generally get the first news from the north and from the Orient at this point. Since this line was built, the Canadian Pacific Railway Company has also laid a cable from Victoria to Port Angeles direct, so that now Victoria has two telegraph lines direct to the United States. Each company has duplex machines, by which two messages can be sent and received on the same wire at the same time.

COAL INDUSTRY.

Work in the vast coal fields of Vancouver Island has progressed so rapidly during the past year, that an extension of the Esquimalt and Nanaimo Railway has been necessitated to Oyster Bay, a point 11 miles distant from Nanaimo, on the eastern coast of the island. Extensive wharves are now being constructed there, to enable vessels to load with facility. A regular train averaging twelve cars, filled with coal, is loaded at Comox, shipped on a large ferryboat and transported to Vancouver daily. The shipments of coal during August from this island amounted to 75,700 tons, the largest quantity ever mined in the same time.

AGRICULTURE.

In general, the meetings recently held throughout British Columbia to establish a system of farmer's institutes were sparsely attended,

and the movement is regarded as not successful. The new provisional government has discharged the commission, appointed some months ago to make a thorough inquiry into the conditions and necessities of the agricultural industry

NEW SYSTEM OF ELECTRIC GENERATION.

During the past month, the work of conducting power from the Sooke Mountains, 18 miles distant from the city, for the tramroad and the illumination of Victoria by electricity has been completed. The water from the mountains starts 2,300 feet above the level of the sea, and is the highest fall in Canada. About 700 feet above sea level and 16 miles from Victoria, these waters form a lake covering 150 acres, into which empties Goldstream River, which is tapped 3 miles from its source by an artificial lake or reservoir covering 7½ acres, 1,122 feet above sea level. From this reservoir the water passes through a steel pipe, 33 inches in diameter, 6,700 feet to the power house of the electric company, which is 460 feet above sea level, thus giving a fall of 1,000 feet from the main lake, and through which 15,000,000 feet of water pass every twenty-four hours, and forming 1,500 horsepower.

The practically inexhaustible supply of water is regulated by automatic governors, insuring steady action of the dynamos. In the power house located at the foot of a mountain is an electric plant without a rival for size and completeness on the North Pacific coast. All electrical machinery has been furnished by an American firm (Hasson & Hunt, of San Francisco).

From the power house the electric current is carried on six copper wires, twenty one-hundredths of an inch in thickness, 12 miles to the city, and furnishes power sufficient to operate the street-car and electric-light systems, and offices and factories in addition. Besides furnishing this motive power, the water is excellent for drinking purposes and is now used throughout the Esquimalt Peninsula, including the British naval station and Victoria West. It is the largest work of the kind in western Canada, and after an inspection of the mammoth machinery, the miles of ditching and piping, the dam construction, the amount of general work accomplished, and its successful result, the expense of nearly $250,000 incurred does not seem excessive.

ADDITIONAL SERVICE WITH SAN FRANCISCO.

A new schedule is announced for the steamship service between Victoria, Puget Sound, and San Francisco. For several years past the steamers have left every fifth day, but in view of the increased traffic, a semiweekly service is to be inaugurated next month.

MINING ON VANCOUVER ISLAND.

Considerable interest has been awakened during the past month relative to mineral deposits on the west coast of Vancouver Island. New veins of copper, coal, and gold have been found. A United States company is operating near Alberin, and the ore mined by them has been assayed in paying quantities; the company has several stamps running, and employs over 200 men.

ABRAHAM E. SMITH,
Consul.

VICTORIA, *September 2, 1898.*

DAWSON CITY AND THE GOLD FEVER.

Consul McCook has sent the Department of State an undated report from Dawson City (received September 12, 1898). Mr. McCook says:

Dawson City, probably the largest mining camp in America, is built on a bog or swamp and contains a shifting population which now numbers about 20,000. Forty thousand prospectors have passed through here from the White and Chilkoot passes. Most of them had a year's provisions. Hundreds are going away daily, not being able to stay long on account of the cost of living. A dinner costs $2.50, and breakfast and lunch $1.50. Lodging is $1.50 per night in a bunk, and a hotel charges $6.50 for a bed per night.

The price of property in the business locality is enormous. A lot of convenient size upon the main street can not be had under $40,000. Lots in a bog off Main street bring from $5,000 to $10,000. To rent a log cabin costs $200 per month. With the exception of the warehouses, the theaters, dance halls, saloons, and gambling houses are about the only establishments which can afford these terms. Along the river, ground leased from the authorities brings $10 per front foot per month. This, with the 10 per cent royalty charged on the gross output, yields a very large revenue.

The prevailing price of labor is $1 per hour, but there are so many idle hands waiting for employment that the supply exceeds the demand and may bring the price down. Still, there is the greatest activity in the erection of large buildings and warehouses.

Most of the prospectors who are coming to Dawson City leave for camps in United States territory, since, apart from the country in the immediate vicinity of Dawson, which has all been staked off, this is the most promising field. But even here, out of more than 5,000 placer claims and 2,000 bench claims, only 200 have thus far paid to work. A great many have not yet been prospected and will

have to be given up to the Crown, because one condition of the grant is that every person having a claim must work it continuously for three months each year. Ninety days' labor at $10 a day is a good deal to risk upon one claim, and a good many who can not afford it will surrender them. The creek claims have been reduced in size from 500 to 250 feet.

Estimates of last year's output range from $8,000,000 to $12,000,000. Work has largely been confined to Bonanza and Eldorado creeks. Dominion, Sulphur, and Eureka creeks will be opened up next winter, as they promise good results. One can not prospect in summer, as the pits which are dug then fill with water. It is by the merest chance that one may strike a rich claim. No poor man should sell out and come here. Organized companies with capital will do much better, as they can hire work much more cheaply than individuals.

In a report dated August 24, Consul McCook further emphasizes the distress among the prospectors in and around Dawson City, and strongly advises no one to join in the hunt for gold unless he has at least enough provisions to last over winter, and enough money in bank to take him home if he is unsuccessful. The consul says he is appealed to daily by men who have no money and can not get work, and he advises such of them as are able to travel to go to St. Michaels, where, he is informed, the Government is arranging to take care of them by putting them in communication with friends in the United States.

STRIKES IN GERMANY IN 1897.

In spite of the Empire's numerous and almost paternal efforts to advance the material interests of Germany's working classes, discontent with existing conditions is increasing. This is evident in the enormous and steady growth of socialism; but it is more particularly localized in the increased number of strikes. In 1896, there were 483 strikes in this Empire, with 128,808 persons actively participating. They lasted, altogether, 1,923 weeks and cost, in actual expenditures out of labor-organization funds, to say nothing of the losses in wages, 3,042,950 marks (about $714,000). In 1897, there were 578 strikes, actively participated in by 63,119 persons. They lasted 1,921 weeks, and consumed, exclusive of wages, etc., about $362,000. Thus the number of strikes was 95 less, the number of persons participating less by 65,789; the duration was about the

same, and the expenditures smaller by about $361,000. This difference is due to the strikes by the dock laborers and textile workers in 1896, in which 55,510 persons took part. Among the trades, workers in wood led with 64 strikes, 12,036 persons participating, and the expenses being about $42,364. Shoemakers follow with 52 strikes, 6,193 participants; formers, with 50 strikes and 2,132 persons; metal workers, 29 strikes and 2,023 persons; workers in tobacco, 24 strikes and 625 persons. Participants, as a rule, seek employment in other places, and are supported out of the funds till work is found. Workers in the same branch, if enrolled in a labor organization, are not allowed to go into a boycotted shop.

J. C. MONAGHAN,

CHEMNITZ, *September 2, 1898.* *Consul.*

ARTIFICIAL MINERAL WATERS IN HUNGARY.

In view of the extensive manufacture and sale of artificial mineral waters in this country, the Hungarian Minister of the Interior (as the supreme public health authority) has issued a new ordinance, according to which licenses to manufacture artificial mineral waters may be issued only to druggists or chemists holding diplomas. The erection of factories for such manufacture will be permitted only after expert examination. The local authorities are expected to care for the regular medical supervision of such factories.

The names of domestic or foreign natural mineral waters may not be made use of. It is also forbidden to use the same bottles, jars, capsules, corks, stamps, or trade-marks for artificial mineral waters as for natural mineral waters of similar composition; and the word "artificial" must be marked in large letters on all vessels containing artificial mineral water. The name of the manufacturer and the place of manufacture is to be plainly written on the label.

These regulations are enforceable by fine, and, in case of repetition, by fine and imprisonment. Failure to observe the regulations may be punishable by the revocation of the manufacturer's license.

In connection with this ordinance of the Hungarian minister, it may be pointed out that mineral waters form one of the principal articles of export to the United States from Budapest and the surrounding locality. The brands now exported are the "Hunyádi János," "Apenta," and "Francis Joseph" aperient waters, from Budapest; the "Lajos" aperient water, from Komárom (Komorn); and the "Salvator" lithia water, from Heperjes (Eperies).

Under the United States tariff law of 1894, owners of mineral springs in foreign countries were obliged to certify that the water exported by them to the United States was in no way prepared by

manufacture. As such certificate was required at the production of each invoice of water, the people of the United States were in some degree protected agair st artificial imitations of the genuine Hungarian bitter waters. Under the United States tariff law of 1897, however, natural and artificial waters are admitted under like conditions of payment of duty, and a certificate of origin has been dispensed with.

FRANK DYER CHESTER,
Consul.

BUDAPEST, *July 27, 1898.*

TRADE OF NEWCASTLE.

Consul Goding sends from Newcastle, July 31, 1898, a newspaper clipping giving a report of the trade at that port for the first six months of 1898, as follows:

The quantity of coal exported, compared with corresponding period of the previous year, was:

Where exported.	1897.	1898.
	Tons.	*Tons.*
Victoria	316,539	304,680
Queensland	10,560	8,950
South Australia	133,274	159,787
Western Australia	87,735	87,033
Tasmania	26,653	31,685
New Zealand	84,176	96,553
Hongkong	34,608	19,458
United States	124,196	121,023
Java	24,080	22,104
India	23,733	6,221
Philippine Islands	31,236	35,648
Fiji	5,873	5,035
Mauritius	4,369	4,698
Peru	11,028	20,365
Chile	185,132	131,230
Singapore	29,741	39,871
Sandwich Islands	27,988	22,766
New Hebrides	1,620	230
Panama	20,764	7,699
Mexico	17,790	5,893
Celebes Islands	4,527	.....
Great Britain	3,550	2,340
New Guinea	540	640
Ceylon	3,600	10,331
Cape Colony	3,792	2,781
Natal	.....	300
Alaska	.....	7,833
Cochin China	.....	1,450
China	.....	3,268
Ecuador	1,135	.....
Tahiti (Society Islands)	.....	1,554
Total	1,223,206	1,167,276
Decrease for period	.....	55,930

Other items of export were:

Articles.	1897.	1898.
Bones.....tons...	331	119
Flour.....do.....	316	73
Hay and chaff.....do.....	2,024	731
Live stock:		
Cattle.....number...	5,719	8,309
Horses.....do.....	8	168
Sheep.....do.....	18,400	33,601
Pigs.....do.....	100	1,647
Bone dust.....tons...	74	594
Other manures.....do.....	224	134
Frozen beef.....cwts...	4,766	12,556
Frozen mutton.....do.....	28,020	34,668
Meats, preserved.....pounds...	371,934	135,575
Copper ingots.....cwts...	500	.....
Silver lead.....do.....	.....	42,361
Zinc spelter.....do.....	.....	1,950
Coke.....tons...	4,221	4,213
Gold concentrates.....do.....	396	35
Tallow.....cwts...	3,780	3,116
Timber, rough.....sup. feet...	286,262	394,867
Wool:		
Greasy.....bales...	9,659	977
Washed.....do.....	4,949	1,105
Cement.....barrels...	1,030	.....
Olein.....gallons...	13,619	.....

HORSES AND CATTLE IN SWITZERLAND.

Consul-General DuBois, writing from St. Gall on August 5, reports a noticeable increase in the foot-and-mouth disease among Swiss cattle. The disease is quite prevalent in Graubunden, the Canton bordering on Austria and Italy. There are more herds affected here than in all the rest of Switzerland. For this reason, stringent measures are enforced to prevent the further introduction of this disease from Italy and Austria.

Although there has been an increase of 10 per cent in the importation of horses during the last ten years, the ten Cantons of Switzerland have fewer horses to-day than they had thirty years ago. Horse breeding, since 1866, has fallen off over 50 per cent. This fact has increased the importation of horses into Switzerland. During the ten years from 1850 to 1860, the average annual importation was 1,000 heads, while during the past ten years the average annual importation has amounted to about 7,500 head. There are now about 38 horses for every 1,000 inhabitants in Switzerland.

Of neat cattle, there are 1,376,696, or 43 head for every 100 of the population.

Of swine, there are 185 for every 1,000 of the population. In the Canton Inner-Rhoden there are 742 head of swine per 1,000 inhabit-

ants, while the Canton of Basel has only 9. There are 168,192 swine owners. The importation of these animals has increased 185 per cent in thirty years.

Sheep raising has declined greatly in Switzerland during the past thirty years, from 447,001 in 1866 to 271,901 in 1896, or 89 per 1,000 inhabitants.

Goat raising has held its own well during this period. In 1866 there were 375,482 goats in Switzerland. There are now 415,875, or about 145 to every 1,000 of the population.

The bee culture has increased during the past twenty years nearly 100 per cent. There are now 275,000 hives in Switzerland. The Canton of Lucerne has 187 hives to every 1,000 of the population, which is the highest average in Switzerland.

BELGIAN SAVINGS AND PENSION BUREAU.

Consul Morris sends from Ghent, August 13, a translation of the annual report of the Belgian Government's savings and pension bureau, which is given below:

SAVINGS DEPARTMENT.

There has been a very large increase, both in the value of deposits and in the number of depositors' books, in the savings department. The increase in the sums on deposit amounted to $9,843,000, the greatest annual increase on record. The increase in the number of depositors' books was 139,042.

The school savings system cooperates in an important measure towards the continued growth of the savings department. On December 31, 1896, the savings system had been adopted in 6,828 institutions of instruction (of which 6,090 were primary schools), with a total of 304,018 pupils. The capital thus saved amounts to $1,311,513.76, almost all of which was deposited in the Government's savings bureau.

A very interesting innovation in the popularization of savings was inaugurated last year. The idea is to endow each newly born infant with a savings book. The necessary funds are obtained either by private gift or subscription or by an appropriation from the town council. Mr. E. Bourhard, a lawyer at Mons, the promoter of this idea, explained the details of his system in a letter addressed to the burgomasters of all the Belgian communes. He proposes that a list of the newly born children be obtained every week from the local authorities, and that this list, together with a sum equivalent to 1 franc for each child, be deposited at the local post-office, upon which a deposit book shall be issued bearing the name of each infant, with a notice that the amount of deposits on the book shall not be reduced to less than 1 franc during the lifetime of its owner. The deposit book is to be delivered to the parents. This proposition offers a wide field to philanthropists.

AGRICULTURAL CREDITS.

Three new agricultural branch offices at Gembloux, Namur, and Lens, respectively, were opened during 1897. During the year, 184 loans for a total of $264,984.18 were made. The total value of agricultural loans negotiated through this

institution from 1884 to December 31, 1897, amounted to $1,282,308.40. The number of agricultural-credit cooperative associations greatly increased. Their number at the end of 1896 was 77; one year later they had increased to 165; 113 of them reported that they had received a total sum of $262,729.38 as deposits, and had made loans to the value of $903,061.13. Forty societies opened credits with the Government savings bureau for a total of $23,031.85, out of which sum they realized $4,753.20.

WORKMEN'S DWELLINGS.

On December 31, 1897, there were 113 workingmen's dwelling or building associations affiliated with the savings bureau. In 1896, there had been 91, and in 1895 88 such societies. Of those existing at the end of 1897, 104, having a capital of $2,154,650.85, were incorporated, and 9 were cooperative.

PENSION DEPARTMENT.

The favor enjoyed by the pension department in recent years steadily increased in 1897, through the aid of numerous propagandists, and the intervention in several instances of the public authorities. The number of new books issued amounted to 17,149, and the number of deposits to 171,506. The mutual-aid societies have helped to bring this enterprise into popularity. The organization of pension societies in the schools was continued. Their number increased from 5 to 51 during 1897. The amounts deposited increased in very much smaller proportions, a fact attributable to the small deposits made by manual laborers and by school children. The percentage of pension books opened in the name of workmen, estimated at 80 per cent in 1895 and at 85 per cent in 1896, seems to be not far from 88 per cent in 1897.

INSURANCE DEPARTMENT.

In the insurance department, 6,873 policies were taken out in 1897 on workingmen's dwellings, the risks aggregating $3,094,108. Life-insurance contracts are less important, there being only 64 of such policies taken out in 1897, valued at $47,862.

CITY TAXES IN BELGIUM.

La Revue de l'Administration et du droit Administratif de la Belgique recently published interesting statistics relative to the receipts and expenditures of the various cities in Belgium for the years 1896 and 1897, showing the amount the respective cities annually receive, as well as the amount expended per capita for communal government, police, public health and safety, public schools, public charities, and communal debt.

The following table shows the receipts and expenditures of the four most important cities of Belgium, viz, Brussels, Antwerp, Ghent, and Liege, by which it is seen that the citizens of Brussels are taxed as such 45.15 francs ($8.713) per capita for the communal debt, and as Belgians 18 to 19 francs ($3.474 to $3.667) for the national debt (114,152,253 francs, or $22,031,385, for 6,000,000 inhabitants). The debt of the city of Brussels is two and one-half times heavier on the citizens than the national debt.

Ordinary receipts.

City.	Population.	Total.		Per capita.	
		Francs.		*Francs.*	
Brussels	194,505	14,462,040.29	$2,791,173.77	74.35	$14.349
Antwerp	269,623	14,714,856.15	2,869,967.23	54.57	10.472
Liege	165,304	6,080,843.40	1,163,602.77	36.78	7.098
Ghent	159,218	5,338,505.14	1,030,331.49	33.52	6.453

Expenditures.

City.	Cost of city government.				Police—health department.			
	Total.		Per capita.		Total.		Per capita.	
	Francs.		*Francs.*		*Francs.*		*Francs.*	
Brussels	1,194,883.33	$230,612,48	6.14	$1.184	1,793,336.53	$246,113 95	9.22	$1.789
Antwerp	678,940.50	91,035.51	2.51	.484	2,530,484.34	488,383.48	9.38	1.87
Liege	468,534.13	89,162.04	2.83	.546	1,252,527.40	242,737,78	7.57	1.461
Ghent	266,892.63	51,510.27	1.67	.322	782,822.52	151,084.74	4.91	.516

City.	Public schools.				Public charity.			
	Total.		Per capita.		Total.		Per capita.	
	Francs.		*Francs.*		*Francs.*		*Francs.*	
Brussels	1,602.813.33	$309,342.97	8.24	$1.59	648,460.46	$125,152.86	3.33	$0.642
Antwerp	2,244,897.02	433,255.12	8.32	1.605	1,039,099.06	200,636.11	3.85	.743
Liege	1,106,765.43	213,605.72	6,69	1.291	133,793.40	25,822.12	.80	.154
Ghent	1,087,027.60	209,796.32	6.82	1.329	264,893.76	51,099.69	4.40	.849

City.	Debt.			
	Total.		Per capita.	
	Francs.		*Francs.*	
Brussels	8,782,009.02	$1,694,927.74	45.15	$8.713
Antwerp	5,557,171.29	1,072,534.05	20.61	3.987
Liege	2,658,935.04	513,174.46	16.08	3.003
Ghent	1,593,189.24	307,485.52	10.00	1.93

It will be observed from the foregoing tables that the citizens of this city are taxed as much, or very nearly as much, for the communal debt of Brussels as the inhabitants of Antwerp, Ghent, and Liege together for their communal debts, although the total population of these last-named cities is more than double that of Brussels. In consequence, rents and living expenses in general in Brussels are in excess of those of other cities in Belgium.

GEO. W. ROOSEVELT,
Consul.

BRUSSELS, *July 29, 1898.*

EMIGRATION FROM AMSTERDAM DURING 1897.

Consul Corey writes on August 11, from Amsterdam, that during the year 1897, 2,031 emigrants left Amsterdam for foreign countries. One thousand seven hundred and nineteen went to the United States, the number being composed of 726 men, 592 women, and 401 children. The other emigrants were for South Africa and Dutch Guiana. The following statement shows their nationality:

Nationality.	Number.	Nationality.	Number.
Netherlanders	57	Roumanians	50
Germans	73	Turks	1
Belgians	3	North Americans	6
Austrians	528	French	2
Hungarians	175	Swedes	1
Russians	816	Total	1,719
Italians	7		

Eighty-nine per cent of the male emigrants had some trade or occupation.

The trades and occupations of the emigrants were:

Occupation.	Number.	Occupation.	Number.
Bakers	26	Millers	2
Barbers	4	Musicians	4
Blacksmiths	23	Painters	26
Bookbinders	3	Photographers	1
Brewers	1	Preachers	1
Butchers	26	Railway clerks	1
Cabinetmakers	36	Seamen	3
Cap makers	1	Seamstresses	42
Carriage makers	2	Servants	16
Carpenters	43	Shoemakers	28
Cigarmakers	8	Soap makers	1
Clerks	12	Students	2
Coachmen	1	Tailors	69
Farmers	28	Tanners	5
Firemen	1	Teachers	3
Glaziers	5	Telegraphists	1
Goldsmiths	1	Tinsmiths	5
Hat makers	4	Typesetters	1
Laborers	332	Turners	3
Lawyers	1	Upholsterers	5
Lithographers	1	Waiters	4
Locksmiths	8	Watchmakers	6
Masons	12	Weavers	4
Mechanics	3	Total	886
Merchants	71		

Classified statement of emigrants with or without occupation.

With trade or occupation	886
Without trade or occupation:	
Men	103
Women	615
Children 1 to 10 years	383
Infants	44
Total	2,031

UNITED STATES TRADE IN NORTH CHINA (CORRECTION).

In CONSULAR REPORTS No. 215 (August, 1898), page 575, it is stated—

That the value of United States exports to China is greater than that of all the continent of Europe (excepting Russia), and greater than that of all Russia, European and Asiatic.

It should read: "That the value of United States exports to China is greater than that of all continental Europe and the Russias, European and Asiatic," as will be seen by the following table:

Value of imports during the year 1897.

From—	Value.		Total.
	Hk. taels.		
United States	12,440,302	$9,193,383	$9,193,383
Continental Europe	8,565,807	6,330,131	8,873,102
All the Russias, European and Asiatic	3,442,449	2,542,971	
Excess of United States imports			320,281

This, I think, makes a better showing of the value of our trade. I admit that my presentation was not as concise as I intended it to have been, and I notice several papers have quoted the above paragraph as an argument in supporting their views.

Referring to the footnote on page 583 of the same report, I think that I have been misunderstood. I intended to convey the fact that the true state of our trade with China does not appear in the customs returns. In the calendar year 1897, I certified to invoices covering merchandise for export to the United States to the value of $159,977.87 gold, all of which was prepared, packed, shipped, and the export duty on which was paid in Chefoo.

During the calendar year 1897, I legalized for one firm alone invoices covering silk and straw braid for export to New York to the value of $102,756.15 gold; yet the Chefoo customs reports, calendar year 1897, show no exports to the United States. The commissioner

of customs informs me that "exports not shipped direct, but via another Chinese port, are of course accounted for at that other port, and must be carefully excluded from the table showing exports to foreign countries from Chefoo." Thus, goods going to America via Japan are credited to Japan; via London, to England; via Hongkong, to that colony; when, according to our method, they would be credited to the country of destination, especially when it is given on the export application. On the other hand, nearly all imports from the United States for the ports south of Shanghai are sent from the United States via Hongkong, where they are put on local steamers and entered in the customs returns as from Hongkong, although often covered by through bills of lading. It is exactly as if the collector of customs at New York should enter and charge duties, per pounds and pence, on an invoice of Chefoo silk shipped from here for New York via London, when actually he treats that invoice as a shipment from Chefoo, and assesses duty according to the value of the Chefoo tael.

Were the Treasury Department to follow the method adopted by the Chinese customs, there would be no imports at New York from Asia via Canadian or Pacific ports. All those via the first route would be imports from Canada; ports like Chicago would have absolutely no foreign trade. The same applies to the returns for exports. Thus, as I stated, if the customs could be induced to show the true state of affairs, American interests would be more correctly shown than they are now; for it is American trade that is the greatest sufferer by this method of showing imports and exports from and to foreign countries.

While on this subject, I inclose a leading article from the North China Daily News.

JOHN FOWLER,
Consul.

CHEFOO, *August 9, 1898.*

NIUCHWANG.

[From the North-China Daily News.]

On the 1st of April, in an article in these columns on Russian designs, we pointed out that the construction of the Russian railway from Petuna via Kirin to Talienwan meant the ruin of the treaty port of Niuchwang, unless the latter port was promptly connected with the North China system of railways. The district through which the Russian railway will pass produces about 70 per cent of the exports from Niuchwang, so that this amount of trade will probably be lost to Niuchwang when the railway is made and Talienwan is opened. The Russian line, it will be observed, is not to go through Niuchwang, but is to pass it at some distance to the eastward. From a village called Kanwangchai, which is under 20 miles eastward of Niuchwang, and through which the Russian line passes, a branch line is to be laid to Niuchwang; and meanwhile until Talienwan is ready to be opened (which is not likely to be for three years), the material and plant for the

Russian railway is to be landed at Niuchwang. This branch line, therefore, is apparently to be the first section undertaken; and when it is in running order, the construction of the main line will be begun both north and south from Kanwangchai.

The Chinese are ready and anxious to extend their northern railway system to Niuchwang and Moukden. This would tap the valley of the Liao River and the districts from which about 30 per cent of the present exports come, saving to Niuchwang a not unimportant fragment of its trade. It would also put Niuchwang in direct communication with valuable coal measures, from which both steam coal and coal suitable for Shanghai's manufactories can be procured. It is estimated by a capable authority that even with the loss of the districts through which the Russian railway will run, the construction of the proposed Chinese railway will maintain the trade of Niuchwang at its present level and probably largely increase it. It is not improbable, too, that to face the competition of the proposed Chinese line, the Russians will make the branch which they are building to Niuchwang for construction purposes a permanent one, and this would without doubt divert to Niuchwang a considerable proportion of the traffic that would otherwise go to Talienwan.

Niuchwang has advantages which are not realized by those who regard it as a small, out-of-the-way port, frozen up in the winter, and with no attractiveness at any time.

It has a fine river extending for a long distance into the interior, with a bar with 18 feet of water on it. Its trade is already well established, and the port is well provided with lighters, warehousing accommodation, mills, etc. It is certain that so long as it remains under the Chinese flag, its trade will be open on equal terms to all nationalities, without preference or distinction; and it is the nearest seaport to the immense districts to which the imports into Manchuria go, and from which the exports come. The great drawback to it is that it is ice-bound every winter for some four months.

The existing foreign interests most nearly concerned in the present and future of Niuchwang are the American, British, and Japanese. There is a British concession at Niuchwang; the foreign-owned land outside the concession is nearly all in British hands. The foreign firms established at the port are mostly American, British, and Japanese. About 50 per cent of the imports are American, the remainder being mostly British and Japanese; while of the ships that had come to the port this year up to the middle of June, 60 were British, 56 Japanese, 17 Chinese, and 36 of other nationalities.

NEW CONDITIONS OF TRADE IN CHINA.

Changes are now taking place in China more rapidly than at any previous period in her history. In June last, the rivers were opened to foreign craft for the first time, and already from the principal ports numerous steam launches have been commissioned for inland traffic, and a revolution in internal trade will follow. Modifications in the collection of likin dues, which permit the breaking of bulk and disposing of a portion of the cargo before the final destination is reached, have rendered additional aid to the foreign merchant. Chinese merchants are beginning to realize that the increased com-

mercial facilities given foreigners also result in benefit to them, and encourage a liberal construction of all trade regulations.

The volume of foreign trade with China for 1897 exceeded that of 1896 by over 32,000,000 haikwan taels.* The value of United States trade in China during the year represents 15 per cent of the total trade of all nations, is double that of Germany, and is second only to that of Great Britain. This advanced position of American trade in the Empire is the result of efforts extending over less than a decade. Kerosene oil no longer holds the first place. The most valuable branch of American trade with China is now that of cotton goods. Over $7,000,000 in cotton fabrics were exported during the year, equal to about 40 per cent of the total exports of cotton goods from the United States. The American drills and shirtings are preferred by the Chinese, as they are heavier and said to be more durable. As cotton is almost exclusively worn by the natives, the market here for American cotton fabrics can easily be made equal that of all other foreign markets combined.

The low price of silver is a drawback to the import trade of China, as it is a potent aid in the export trade. For instance, the price in gold of our cotton drills when they reach China is double, while to the ordinary consumer it requires as much exertion or as much of his native product to procure the silver dollar as it did ten years ago, when the relative value of the metals enabled him to secure almost 50 per cent more in foreign goods for his dollar. On the other hand, the low exchange has placed an equally heavy bounty upon exports, and as a result the exports for 1896 were about double the volume for 1886, and the total for 1897 shows a still further increase, and this, too, in spite of the fact that the returns for 1886 included the great tea exports from Formosa, now transferred to Japan.

There is an unlimited market in China for any article of food the price of which can be brought within reach of her countless millions. An article even a little beyond the reach of the masses still finds an ample market with other millions of people who compose the middle classes. In this connection, I wish to call attention to the recent efforts to introduce maize into foreign countries as an article of food. By improved methods, corn flour is now manufactured in the United States which, being freed from the germ or oily portion of the grain, does not mould or damage in transit. Hitherto, the great drawback has been the difficulty in handling the milled corn, as it would mould and spoil before it reached its destination. With the price of corn flour always 50 per cent less than that of wheat

* The value of the haikwan tael in 1896, according to the quarterly estimates of the United States Director of the Mint, was 81.1 cents; in 1897, it was 73.9 cents.

flour, it is possible to find a market here for the surplus corn of the Western States.

It is always difficult to introduce any new article in China, and the importation must be gradual. The price is an important factor, especially if the article is intended for food. The price here in silver would be double the home price, with freight added, and would be compared with the price of rice. Being especially strengthening and wholesome, its introduction would be facilitated in proportion to its cheapness as compared with the native chief article of food. When wheat flour advanced about 5 cents silver, importations began to decline. When it reached 7½ cents, as it did during the spring months, it was threatened with extinction. Rice is usually quoted at about 3 cents silver. Four months ago, it was almost double that. Now, it is below that figure. Within this range, during the course of each twelve months, millions of bushels of American corn could find a profitable market, if once introduced.

The means of introducing the corn flour deserves special mention. The Chinese are slow to originate new methods of cooking, but readily copy an idea which pleases their fancy. The cooks, like all artisans here, are organized into guilds. Thousands of people eat at the public restaurants. Whatever is served at these restaurants will soon become a popular dish. If a few dozen of these cooks were taught how to prepare corn flour for food in some simple, inexpensive manner, and were given the flour at an especially low price as an inducement for them to serve it, it would not be long before all the cooks in that community would be using it. But unless some systematic effort is made to introduce it, it will never enter into the bill of fare in China.

American canned goods are slowly gaining a foothold. The difficulty encountered here, as in other lines, lies in the scarcity of American merchants and special advertising agents, and the lack of a disposition on the part of our manufacturers and exporters to cater to the peculiar wants of the Chinese trade. There is a certain superior quality recognized in many kinds of canned goods which reach the far eastern market from the United States, but this is too often counterbalanced by higher prices, and these prices are frequently open to the suspicion of having been made by the local dealer, or middleman, rather than justified by the exporting price.

What is especially needed in Chinese ports is sample rooms, where specimens of American cotton fabrics of all kinds would be displayed, where canned fruits, vegetables, meats, and other articles of current demand could be inspected, and prices given, together with the names of exporters. There is such a sample room here at Amoy, in connection with the Japanese consulate. The expense is nominal

and the results beyond comparison. This consulate would gladly take charge of such an exhibit. It would also lessen the probability of an extra charge of 50 or 55 cents silver per pound for American breakfast bacon, and similar prices for American canned fruits, when it is a notorious fact that the freight rate from San Francisco to Amoy is less than 50 per cent of what it is from there to the eastern slope of the Rocky Mountains.

A. BURLINGAME JOHNSON,

AMOY, *August 5, 1898.* *Consul.*

BUSINESS POINTS FOR THE PHILIPPINES.

From an interview with a merchant of Manila, I am enabled to give the exporters of the United States certain points which may be of value to business men who intend to enter the field there.

The Philippines contain over 7,000,000 inhabitants. The Chinese, who are in the majority among the aliens, control the retail trade, while next to them come the Spanish dealers. It is estimated that there are about three hundred other Europeans in business in the whole group. The richest dealers are the creoles and mestizos, a combination of Chinese and Tagalese.

In Manila, there are many large cigarette factories, some of which employ as many as 4,000 hands. A few German, Swiss, and English firms have entered that field. There is also a sugar refinery, a steam rice mill, a Spanish electrical plant, a Spanish telephone exchange; a Spanish tramway, worked partly by steam and partly by horsepower; rope factories, worked mainly by hand (a few use oxen); a Spanish brewery, which furnishes a good beer; a German cement factory with 70 hands; a Swiss umbrella factory; and a Swiss hat factory, which makes felt and straw articles, the latter out of Chinese straw braid. A cotton mill with 6,000 spindles and with capital (English) of £40,000 ($194,600) is in process of erection. The European firms in Manila are divided as follows: 45 Spanish, 19 German, 17 English, 2 English and 6 Swiss brokers, 2 French storekeepers with large establishments, 1 Dutch, and 1 Belgian. Small retail stores (40 in number) are kept by Chinese firms. The German and Swiss firms are general importers, while the export of hemp and sugar, the import of domestic dry goods, and the shipchandlery trade are in the hands of the English.

Credit from one to three months and 5 per cent is given, while spot-cash sales command a discount of 7 per cent. Caution is advised in dealing with the Chinese merchants, as Manila has no mercantile register like Hongkong.

Cotton yarns are a heavy import article, so far mainly from Barcelona, by reason of the minimum Spanish tariff. The Spanish manufacturers have done what England, Germany, and Switzerland have always refused to do, and that is to renumber the yarns. In Manila, No. 10 is sold numbered 24, No. 16 numbered 30, No. 18 numbered 32, No. 22 numbered 49, No. 32 numbered 50, and No. 36 or 40 numbered 60. The orders given are for four-fifths unbleached and one-fifth bleached. Dyed yarn is bought in Nos. 20 and 32, in colors of orange, green, and rose. Turkey-red yarn, in the correct numbers 20 to 40, especially 32, used to come from Elberfeld; but of late years Spain has managed to supply it. Bleached and unbleached shirtings and drills, from Manchester, are sold in large quantities, but of late the pieces have decreased in yards as well as in widths. The staples now are white shirtings, 26 inches wide and 36 yards long; gray T cloth, 25 inches wide and 21½ yards long; gray long cloth, 28 inches wide and 32 yards long; and gray drills, 25 inches wide and 27 yards long. Colored prints, 24 inches wide, with red ground and fancy crimps, are good sellers. Ginghams and chellass, for bed coverings, etc., common quality, in large patterns with red ground—some with yellow or blue squares, some with indigo ground, and a few in green—in pieces of 24 yards, find a good market, while cotton cassinette, in light weight and double width, for trousers, is in demand. Handkerchiefs, 17 by 18 inches and 22 by 22 inches, white, or white with colored borders, are the correct thing. Black cotton zanellas, 18½ inches wide, for the dresses of the country women, and aniline black satins, in 45-inch goods, are considered stylish. Woven cotton underwear is a great staple, and white cotton bed quilts, in fancy patterns, are used as ponchos, after a hole has been cut in the center. It is estimated by my informant that 500,000 dozen undershirts are used annually—two-thirds with arms half-length, sizes 34 to 40, 27 inches long, bleached white, striped, printed, and network. Men's cotton socks, 9 to 11, and ladies' cotton hose, 8 to 9½, are the right sizes. Cheap cotton-lace pinta fichus are worn by all the women.

Other articles which have a good sale are low-priced sewing machines, carriages and parts, enameled ware for cooking utensils, and, last but not least, American clocks, which now have a good foothold, and for which there is an increasing demand.

ADOLPH L. FRANKENTHAL,

BERNE, *September 16, 1898.* *Consul.*

AMERICAN IRON PIPES IN SCOTLAND.

Some time since, the Glasgow town council advertised through its water committee for 1,000 tons of iron piping. A number of firms submitted proposals, and upon opening the bids it was found that a Philadelphia firm's offer was the lowest by several hundred pounds. That a foreign firm should thus be put in the way of getting the contract over local firms was embarrassing, and an excuse was sought to give the Glasgow firms another chance. It was found that the Philadelphia offer was for 12-feet piping, instead of 9 feet, as advertised, although the chief engineer said the difference in length was not material. Consequently, all offers were rejected and new bids solicited.

This time the Glasgow firms brought their prices down a little below the first offer of the Philadelphia firm, but the latter had also reduced its bid, and its offer was the lowest by a small margin. The committee, notwithstanding, decided that a Glasgow firm's bid was the best, and recommended the council to give it the entire contract. An amendment, however, was offered in the council that the Philadelphia firm be given three-sevenths of the contract and the Glasgow firm four-sevenths. This amendment, after strenuous opposition, was adopted by a vote of 39 to 21. In the discussion, it was intimated that possibly the reason why the Philadelphia firm could underbid the local firms was because it did not pay its workmen as good wages. This brought out the statement that the Philadelphia firm paid its men better wages, but that the Philadelphia workmen produced about 25 per cent more in the same time than the Glasgow workmen, which made it possible for the foreigners, 3,000 miles away, to lay their goods down in Glasgow at a less price than could be quoted here.

SAMUEL M. TAYLOR,

GLASGOW, *September 16, 1898.* *Consul.*

UNITED STATES BICYCLES IN SCOTLAND.

It is intimated in the press that the next year will see a very appreciable decline in the cycle industry of Great Britain. This statement is founded on the supposition that there has been an overproduction, rather than a diminished demand.

At Coventry, the center of the British cycle industry, compared with this time last year, there are said to be four thousand fewer per-

sons employed, and many thousands of employees are now working only thirty hours weekly. This condition is attributed to the disproportionate increase of manufacturers over the number of riders. It is said there will be a marked reduction in the prices next year. For high-grade machines, the price will range from $55 to $75, and reliable wheels will be offered at $35 to $45.

My own observation, so far as this district is concerned, leads me to believe that the tremendous influx of American wheels is accountable for the alleged overproduction. Certain it is that this year there has been a very marked increase in the number of American wheels in use, notwithstanding a determined effort, amounting almost to a boycott on the part of a majority of dealers, to keep out the American make.

I attribute the increased sale of the American cycle not so much to its superiority as to the fact of its cheapness. All things being equal, so far as price and general appearance are concerned, the average British purchaser will select a British wheel, if indeed he will not give the British make the benefit of a difference in price. But British manufacturers and dealers, up to the present time, have insisted on maintaining prices far above those demanded for United States wheels, much to their own disadvantage. Whether they can make their present high-grade wheels and sell them at American prices, remains to be seen. The supposition is that the profit on each wheel has hitherto been something enormous, and that they can make the reduction in price intimated and still have a good margin.

In view of the sharp competition which this contemplated reduction in price would mean for American wheels, the latter, to retain the advantage they now enjoy, must depend more on merit and superiority in the future than on the difference in price. In this connection, I suggest that more consideration be given to climatic conditions as they obtain here, and also to the character of work required of a wheel.

As it rains here about three days out of five, it is practically always damp. Dampness produces rust, hence wheels with painted spokes, though not so showy, are more lasting. All wheels should have both front and rear mud guards, and the latter, on ladies' bicycles, should come well down on the back of the wheel. I believe a wheel with a good, strong brake is adapted to this market, though it should be made detachable. The average rider here expects to use the same machine several seasons; consequently, durability must not be sacrificed too much for the sake of neatness and general good looks.

There is a tendency toward higher gear, though it ranges all the way from 65 to 80.

Wooden rims are no longer a serious objection. Some manufacturers here have adopted them. Highways are lined with hedge fences, and in the month of August they are trimmed, resulting disastrously to the tires of the cyclists. The tire that will withstand thorns the best will be the most popular. Manufacturers should remember that prejudice goes a long way here.

An American wheel that breaks down in any one of its parts arouses more adverse criticism than the same accident to a dozen British wheels. Hence, special care should be exercised in the selection of parts for export use.

SAMUEL M. TAYLOR,
Consul.

GLASGOW, *September 23, 1898.*

STEAM TURBINE IN ENGLAND.

Consul Metcalf sends from Newcastle-on-Tyne, under date of September 17, 1898, the following extract from a newspaper:

THE PARSONS STEAM-TURBINE WORKS.

We understand the new works of the Parsons Steam Turbine Company at Wallsend-on-Tyne are now complete, and the manufacture of patent steam turbines, similar to those which have driven the now famous *Turbinia* at such an unprecedented speed, has practically commenced. The works cover about 11½ acres and contain three rows of well-equipped fitting and machine shops, space for several berths, and a fine block of drawing and commercial offices. The company which took over Mr. Parsons' patent and furnished a capital of £200,000 to carry on the enterprise was formed in August of last year, and in the September following received its first order—from a foreign government for a torpedo-boat destroyer of about 200 feet long, to have turbine engines of 10,000 horsepower. In March this year, the company received its second commission, this time from the British admiralty, for a vessel of similar size and type. Work on both these vessels and their machinery has now commenced—the hulls at a local shipyard and the turbine engines at the new works—and the first one is expected to be ready for launching before the year closes. Other orders, we hear, have since been booked, and the new works are starting with every prospect of prosperity from the very beginning.

That there is a great future before the steam turbine, no one now doubts. The advantages of the turbine over the ordinary marine engine are so pronounced in the way of space, weight, and speed, that many engineers do not hesitate to describe it as one of the leading inventions of the century, which is destined to revolutionize marine propulsion and inaugurate a complete change in the shipbuilding and shipping trades—a change that may not improbably be as great in its way as the substitution of steam for sail shipping. For speed there is certainly nothing afloat that can touch the *Turbinia*. The tremendous impression that this little craft made at the great naval review last year is still fresh in the public memory, but she has since improved upon this; and on some of the private runs she has latterly taken off the Tyne she has easily attained 35 knots, and the *Turbinia* is only a small ex-

perimental launch of 100 feet in length and weighing 45½ tons, all told. With a longer and a bigger vessel, it is reasonable to assume that a greater speed still can be attained, and Mr. Parsons himself entertains no doubt that a vessel can be built to steam at 40 knots. As the destroyers this new company is now building are twice the length and six times the weight of the *Turbinia*, and will have engines of five times the *Turbinia's* horsepower, it will be interesting to note by how much they will exceed the *Turbinia's* speed. As a matter of fact, the two destroyers now building are guaranteed to produce a minimum speed of 35 knots; but as they will embody many improvements which Mr. Parsons has been able to evolve during his experiences with the *Turbinia*, and are to be much larger and more powerful, we understand that there are reasonable expectations of attaining 40 knots.

But speed, after all, is only one of the advantages of the steam turbine. It occupies much less space in the hull, since the steam acts direct upon the turbines and the ordinary cylinders, cranks, and shafts are dispensed with, and consequently saves enormously in weight and space of machinery. And, no less important, it burns much less coal in proportion to the speed it develops. Such a high speed as 35 knots inevitably means forced draft and heavy coal consumption, but even the little "*Turb.*" saves 15 per cent of coal traveling at ordinary accepted rates, and the saving would be greater in larger vessels. Less coal means less bunker space and more carrying capacity; indeed, apart from increased speed, the strong point about the steam turbine is the small space and weight it occupies in the hull, as compared with the existing triple-expansion machinery, which is a consideration that may in time lead to its adoption in the ordinary tramp of commerce, though for the present the steam turbine will no doubt be mainly utilized for destroyers, cruisers, and passenger vessels. Another point to be noted is the absence of vibration. This, as marine engineers and naval architects know full well, is the curse of high-speed steamers, and is well-nigh incurable by any means whatsoever. It may be unpleasant to be on the *Turbinia's* deck when she is traveling at 35 knots and cutting the water like a knife, but there is no torturing vibration such as is experienced in an Atlantic greyhound, and still more in the present-day torpedo destroyer. And, finally, it needs to be said, in order to remove a common misapprehension, that the steam turbine can be stopped and reversed with even greater facility than the twin-screw engine. The inventor has worked at this problem for years, and he has succeeded so well that the *Turbinia* can be handled at will with absolute precision. She can be brought to a standstill within forty seconds, for one of the propellers on the center shaft is used solely for reversing, and can be set in operation by the reversing gear even before steam is shut off on the driving propellers; and, furthermore, having three shafts, by shutting off steam on one shaft and keeping the other at work while using the reversing propeller, she can be quickly turned and handled in any direction while going at full speed.

IMPORTANCE OF GOOD SEED IN SUGAR-BEET CULTIVATION.

The results of the war with Spain are bound to effect changes in various directions that no one could have forseen at the beginning of this year. Not the least important is the bearing they will undoubtedly have on the sugar industry in Germany and in the United States. An enormous increase in the production of sugar in the

islands of Cuba, Puerto Rico, the Philippines, and Hawaii is probable in the near future. With coolie and Chinese labor in the Orient and in the Pacific, with the stimulus of American energy and capital in the West Indies, and with the more or less intricate bounties of Europe, the sugar question has become a very complicated one.

Though the outlook of the young beet-sugar industry in the United States is not so promising as it was a year ago, it is much too early to become discouraged. While it may be advisable for those planning to start new plants to make haste slowly, yet the good work already begun should continue. Especially should the work of locating the areas in the United States suitable for the culture of the sugar beet be continued, as this can be done without risk or loss of money, the sugar beets being capable of utilization as feed. In reading the reports of our experiment stations in various States, both as to the yield of sugar beets and also as to their saccharine qualities, one can not but admire the wonderful progress made in this new industry within a few years, and to congratulate our people engaged in it upon their success.

Sugar is made, not in the sugar factories, but out in the fields. Therefore, it is impossible to pay too much attention to the cultivation of beets containing the highest proportions of sugar, and, at the same time, with the largest tonnage per acre. In order to produce such, the selection of suitable soil, the climate, the rainfall and length of season, the fertilizing and planting, the cultivating and harvesting—all these are very important factors. But the most important of all is to start out with the best seed obtainable; for good seed, after all, is the foundation of successful sugar industry. If I may express an opinion, based on my personal observation, it is that some of our beet growers should insist more than they have upon getting none but the best of seed, no matter what the price may be.

I will not enter upon the history of the origin and development of the beet seed; nor will I dwell upon the different varieties and their merits. I have had occasion to visit several of the celebrated German stock farms, where they produce seed that is sold to all sugar-producing countries of the world. With the accumulated knowledge and experience of a century of investigation, with an investment of enormous capital, and with a vast amount of science and skill, energy, and labor, their methods of producing a pure and high-grade seed are as perfect and successful as are those employed in the raising of fine breeds of horses and cattle.

The high-grade seed grown in this country is now in the lead everywhere. Even France is beginning to import German beet seed, thereby conceding its superiority. I know that one German

firm alone shipped 30,000 sacks of seed to France. I feel safe in saying that altogether not less than 100,000 sacks of German beet seed were bought by Frenchmen last season, in spite of the 30-francs ($5.79) customs duty which they had to pay on every 100 kilograms (220 pounds). I am informed that most of these orders have been duplicated for next season, and the amounts in many cases doubled and trebled; all of which shows clearly that even France now prefers German beet seed, and I am not at all surprised to learn that there is a movement on foot in that country to increase the tariff on imported seed.

The first-class sugar factories of Europe buy none but the very best seed, grown from high-grade individual "mother" beets, to distribute among the beet growers; thus not only maintaining the standard of their sugar beets as to quality and quantity, but also putting themselves in a position to compete in all the markets of the world. This first-class seed is sold and delivered by the growers on board cars in the Prussian province of Saxony, at from 8 to 10 cents per pound, which is a moderate price, considering the fact that it takes at least four years to get it into the market.

There is also a second-class seed offered for sale in this country, at from 5 to 6 cents per pound. This is commonly called the "Nachzuchtsamen," being a seed produced not from the mother beets, but from the first-class seed mentioned above. This inferior grade, however, is not used by first-class sugar men in Germany, France, Holland, and Belgium, but most of it goes to Austria, Russia, and the United States. And this is the reason why I deem it my duty to call attention to the importance of getting only the very best of seed obtainable. In my opinion, those American growers of sugar beets who buy cheap grades of seed make a great mistake. All kinds of seed have a natural tendency to degenerate. Even the first-class beet seed mentioned above will not bring forth beets that come up to the standard of the original or mother beet, but will show a loss of one-half to 1 per cent of sugar content. Now, the second generation of seed will degenerate more than as much again, and lose from 1 to 2 per cent. This is a small amount, when considered by itself; yet it is sufficient not only to turn the profits of a sugar factory into a loss, but even to drive the concern to the wall.

To illustrate this:

Factory A slices 50,000 tons (short) of beets, which would yield about an average of 15.5 per cent sugar in the extraction. After deducting the sugar left in the molasses and in other waste, this would leave about 13 per cent—6,500 tons of pure granulated, marketable sugar, which at $50 a ton would net $325,000.

Factory B slices the same amount of beets, grown from second-class seed, which, at a fair average, have about 1.3 per cent less of sugar in the extraction. After this material has also gone through the process of refining, there will be 11.7 per cent—5,850 tons of marketable sugar, which at $50 a ton would net $292,500.

It will be seen at a glance that while both factories use the same amount of material, and have the same expenses for labor, fuel, etc., there is a difference in the gross receipts for manufactured sugar amounting to $32,500.

Factory A bought 55 tons of first-class seed, at $180 per ton, $9,900; Factory B bought 55 tons of second-class seed, at $120 per ton, $6,600. It will be seen that Factory B wanted to buy "cheap" and to make money fast. It did, indeed, save $3,300 at the start; but Factory A began by planting the very best seed obtainable, and came out at the end of the season with $29,200 cash ahead of its competitor, and was in the position of declaring a handsome dividend.

Like so many other things in life, the cheapest beet seed is the dearest. It pays to get the very best, and only the very best is good enough. Let the good work of experimenting in the field of sugar-beet culture continue, in order to learn exactly what we can do in the face of fierce and growing competition, but let American growers determine not only to try different varieties of seed, but also to plant none but seed of high grade and pure pedigree.

HENRY W. DIEDERICH,

MAGDEBURG, *September 1, 1898.* *Consul.*

FLOATING EXPOSITION OF AUSTRIA.

The growing necessity of adopting new and energetic methods in order to obtain a share of foreign commerce, has induced the manufacturers of Austria and Hungary to conceive the project of sending a floating exposition of sample products to the Far East. The idea is not a new one, a similar expedition having been undertaken by Switzerland in 1860. An agreement has been concluded with the Austrian Lloyd Steamship Company, by means of which Austrian manufacturers shall be placed before the residents of the most thickly populated centers of the Orient. This is the most practical, and at the same time the most economical, method of opening commercial relations and putting the consumer in direct contact with the producer.

In the course of the journey, the ship will visit ports in the Orient, India, and certain islands in the Pacific and Indian oceans; among

these may be mentioned Piræus, Salonica, Constantinople, Smyrna, Alexandria, Mossowah, Aden, Bombay, Colombo, Calcutta, Akyab, Rangoon, Singapore, Bangkok, Saigon, Batavia, Macassar, Sandakow, Cëbu, Manila, Pakhoi, Kyao-chau, Canton, Hongkong, Swatow, Amoy, Kelung, Fuchau, Shanghai, Chinkiang, Wei-hai-wei, Chefoo, Port Arthur, Yuensan, Nagasaki, Kobé, and Yokohama. The directors of the exposition reserve the right of refusal to enter some of the ports.

The arrival of the ship in the various ports will be announced, sometime in advance, in the most widely circulated daily papers of the place; also by posters on the walls and by printed circulars. The length of stay of the ship will be stated. The exposition will be free to all, and catalogues in four different languages will be distributed gratuitously to visitors.

Thirty or forty experts accompany the exposition, to give information; they will be authorized to receive orders, and will sell only at prices fixed by exhibitors. The ship will be fitted with booths, lighted by electricity, and the hold will be a vast storehouse, arranged with a view to the greatest convenience. There will be a bar in one of the large rooms on the upper deck, where manufacturers of beer, liqueurs, mineral waters, etc., will show their merchandise, so that visitors may taste before giving an order. An ice machine on board will insure the freshness of all products, particularly wine and beer.

This expedition is to leave Trieste December next, and the journey is to be of six months' duration. Each exhibitor will pay according to the space that he desires to occupy. The advantages offered by the exposition are as follows:

(1) A fixed space will be allotted to each exhibitor, according to the nature of his exhibit. Show windows, cases, and counters will be furnished by the company.

(2) Each exhibitor will be represented by an expert, who will explain the exhibit to visitors and buyers.

(3) The company will endeavor to procure the most capable experts and put them in direct connection with exhibitors.

(4) On the arrival of the ship in different ports, circulars will be distributed gratuitously to the inhabitants; posters will be placarded on the walls and in all public resorts in the town.

(5) Each exhibitor will receive a detailed report, instructing him as to the products that will be likely to meet with the greatest favor in the countries visited.

(6) He will be permitted to embark goods for sale, provided there is space on the ship for the same.

(7) The product of the sales will be remitted to the merchants

by the Union Bank of Trieste, upon the authorization of the directors of the exposition, and before the return of the ship. Information as to sales will be sent from each port to the above-mentioned bank, which will pay all or in part upon the presentation of the proper draft.

The company has received its permit from the Minister of Commerce of Austria and Hungary, and the Imperial Government has granted a subsidy of 50,000 florins ($20,300) to encourage the enterprise.

W. P. ATWELL,
Commercial Agent.

ROUBAIX, *September 19, 1898*

AMERICAN FURNITURE IN SOUTH AFRICA.

There is no reason why the trade in American-made furniture should not materially increase in South Africa. For 1897, the value of American furniture imported into South Africa was $254,979,90, being second only to that of the United Kingdom; Germany standing third. American manufacturers should send their furniture "knocked down" and so made that it can be put together here with ease, each part numbered correspondingly. The trouble is that furniture from the United States comes largely "set up," and what is sent knocked down has not been assembled or put together before being knocked down, or not numbered after being knocked down. The freight is, say, 20s. 6d. ($4.98) per 40 cubic feet, and when sent knocked down there is a saving of from 50 to 100 per cent. Germany and Sweden have a large trade in chairs, both in South Africa and South America, and the trade in "bent work," as it is called, is also large. The chairs are light, strong, are shipped knocked down, occupy but little space, and are easily put together; each part being plainly numbered. They have been set up before being knocked down, and are put together, not with glue, but with bolts and screws. I venture the assertion that if American manufacturers will adopt the German methods in packing, the market is theirs.

The same may be said in reference to all other classes and kinds of furniture. The sale of tables, bedsteads, bureaus, washstands, sideboards, etc., can be increased several hundred per cent by shipping in small compact packages, with the furniture so made that on arrival here the parts can be assembled easily and correctly.

There is no fault with the prices charged by American manufacturers, even with the duty added; but it is the excessive freights on account of bulk, and the difficulty of putting together, if shipped knocked down, of which the dealers complain.

The imports for 1897 into South Africa were:

Country.	Value.	
United Kingdom	£331,172	$1,611,649
Hongkong	1,568	7,631
India	908	4,419
Belgium	2,285	11,120
France	855	4,161
Germany	30,802	149,897
Holland	4,274	20,799
Japan	205	998
United States	52,465	255,321
Sweden	10,282	50,037
All other countries	4,966	24,167
Total	439,782	2,140,199

J. G. STOWE,
Consul-General.

CAPE TOWN, *August 16, 1898.*

ADVICE TO UNITED STATES EXPORTERS.

In the interest of the manufacturers of the United States and their representatives, I would like to make the following suggestions:

When manufacturers of the United States sell or consign goods to dealers with the knowledge and understanding that the latter are to pay the freight, duty, and carriage on the goods, and in addition set them up in their warehouses, exhibit them, praise their merits, and advertise and travel in the interest of the goods, these dealers should be protected.

Orders received by the manufacturer direct from seller or users should, in most cases, if filled direct, be a credit to the representative here. These direct sales, which I am informed occur quite frequently without any credit being given to the one who has really introduced the goods, have a tendency to cause a lack of confidence in the foreign dealer through whose instrumentality the goods have been brought to the notice of the foreign tradesman. The English and German manufacturers are very kind to the dealer who first takes hold of and introduces their goods, and in most cases credit him a commission on sales made direct by the manufacturer.

The English and German manufacturers are also willing to bear a certain share of the expenses in introducing their goods. For instance, they will spend, or allow to the dealer, a certain sum for the advertising. I know of English paper and drug manufacturers who allow their representatives quite a large sum for advertising purposes, besides their commission or margin profit.

Merchants visit the warehouses of the representative of the manufacturer here, examine the goods, obtain the price, the name of the manufacturer, and all other necessary information, and then, being pleased with the goods and desiring to purchase, write to their export commission house in the United States with whom they have been doing business to buy said goods direct of the manufacturer. I can not ascertain that any advantage arises by this action, for it is not to be supposed that the manufacturer will sell to the export commission house at any less price than to his patron across the water; or if at a less price, the difference must be offset by the commission and other necessary expenses paid the export houses.

While the export commission houses of the United States have been, and are now, the principal factors in the introduction and sale of American products into South Africa, yet when connections are once made direct with reliable houses here, these houses should be protected, or confidence in American manufacturers will be lost.

J. G. STOWE,
Consul-General.

CAPE TOWN, *July 26, 1898.*

WINDMILLS IN SOUTH AFRICA.

A large number of windmills of American manufacture have already been introduced into this country; but, as they are entered at the custom-house under the head of agricultural implements, it is not possible to give the number or value. Suffice to say that a demand for this class of goods will soon be in evidence, as the different governments of South Africa are making ready, after many experiments, to present bills to the legislative bodies for the establishment of various systems of irrigation.

Well drills have been introduced, but not in sufficient numbers to meet the demand. South Africa is to a very large extent an arid country. It has its wet and dry seasons, although enough rain falls during the wet season, if it were conserved, for irrigation purposes. A scheme is on foot to grant to parties drilling wells a certain "bonus" from the government, in addition to the charge for the work to be paid by the landowner, provided the well produces water. The government of Cape Colony has employed William Ham Hall, an American citizen, as consulting hydraulic engineer. He has made an exhaustive survey, and his report to the government is comprehensive.

While the plans of the government, if carried out, will be in the line of large reservoirs, etc., other portions of the country not in the vicinity of the proposed improvements will have to depend upon

wells, from which the water will be pumped by windmills or other appliances. The exhibition at Grahamstown, this colony, to be held during December, 1898, and January, 1899,* will present the opportunity for American manufacturers of windmills and pumps to exhibit their productions.

The only drawback to the success of irrigation is that a large number of the farmers of this country, although owning large tracts of land, cultivate but a few acres. From these acres they produce enough to support themselves, and they have no ambition to do more.

The English styles of windmills are heavy and cumbersome, and the manufacturers of the United States need only to push trade to win success. It is useless to send circulars, for but little dependence can be placed upon them. Foreign trade once captured is easily retained; but when in the hands of the manufacturers of other nations, it is hard to win. Goods once introduced are hard to displace, even with a newer, cheaper, and more efficient article. Samples and tests will talk more and produce quicker and better results than catalogues in the hands of the best salesmen.

J. G. STOWE,
Consul-General.

CAPE TOWN, *July 14, 1898.*†

* See CONSULAR REPORTS No. 214 (July, 1898), p. 468.

† This report, says the consul-general, has been delayed, as he wished to send with it a copy of the "irrigation bill." The bill has been filed for reference in the Bureau of Foreign Commerce.

NOTES.

American Wire Nails in Europe.—Consul Halstead writes from Birmingham, September 10, 1898:

In an article on the manufacture of nails, after showing to what extent wire nails have been substituted for cut nails, the British Iron and Coal Trades Review says that "figures published from time to time make it clear that the United States threatens Europe with serious competition in the nail trade, despite the fact that it is a highly finished product, as ironworks' products go, and involves the employment of a large amount of skilled labor. At the average wholesale price of $1.08 per keg of 100 pounds, the United States appears to be prepared to sell cut nails at works for about $23, or about £4.15, per ton—little more than the British price for steel rails." "This, moreover," adds the Review, "is not the price for export purposes alone, but the average American price for all purposes for a whole year. We have never heard of any price approaching this figure being quoted in Europe. British nail manufacturers would be likely to find it worth their while to ascertain how it is done, compatibly with the payment of the higher range of wages common to all American industries."

American Roofing Slates in Denmark.—Vice and Deputy Consul Blom sends the following from Copenhagen, under date of September 9, 1898:

About two years ago, I called Danish importers' attention to American roofing slates, and have recently called upon the importers to hear their opinion. Building operations throughout the Kingdom are flourishing, and the supply of Welsh roofing slates is not sufficient for the demand; there is, therefore, a possibility of a market in Denmark for American roofing slates.

Slate is not produced in Denmark, but is imported principally from Port Madoc, Wales, in the following sizes: 26 by 16, 24 by 14, and 24 by 12—all blue.

Importers inform me that the American slate is inferior in quality to the Port Madoc, but that small lots are now being sold here. The freight rates from the United States to Copenhagen fluctuate

between 17s. 6d. to 20s. ($4.28 to $4.86) per ton, which is considerably higher than by sailing vessel from Port Madoc; but the competition between steamship lines from New York to Copenhagen is getting keener, and lower freight rates can, no doubt, be secured.

The principal importers are: Axel Prior, 33 Bredgade, Copenhagen; F. Gottlieb, 27 Tommerpladsgade, Copenhagen.

American Canned Goods in Denmark.—The following, bearing date of Copenhagen, September 10, 1898, has been received from Vice and Deputy Consul Blom:

The crop of fruits and vegetables in Denmark in 1898 must be considered a complete failure, and there are, therefore, good prospects for the sale here of American canned goods.

I am informed that large orders have been recently sent to American firms. The largest importers and dealers in Copenhagen are Ad. Trier & Goldschmidt, Styhr & Kjär, Gulbrandsen Andersen & Co., A. T. Möller & Co., Jacob Deuntzer, S. M. Salomonsens Eftfl, V. Bockelund, Ferd Andersen & Co., C. I. Caroe, and Michael Bülow.

The commercial agency of P. V. Fournais & Co., in Copenhagen, can rate these firms.

Demand for Dovetailing Machines in France.—Consul Brittain writes from Nantes, September 8, 1898:

One of the leading business men of Nantes informs me that certain American woodworking machines used in dovetailing lumber for packing cases would find a market here. The gentleman was unable to give the name of the manufacturer, or the exact name of the machine; but said he saw them working in England, and that they did their work neatly and rapidly. An immense amount of lumber is constantly used here in making the cases in which small sardine boxes and packages of conserves are packed for shipment. Not only could the machine be used in Nantes in dovetailing lumber for boxes, but also at Brest, Lorient, and Concarneau, where other large sardine factories are located, and at Samur, where quantities of fine wines are packed for shipment. Thousands of cases are also used by the extensive biscuit factories of Nantes. American manufacturers wishing to place the machines on the market in this part of France will do well by corresponding with Mr. Edward Kerr, 3 rue Gresset, Nantes.

Dried Apples and Staves in France.—In reply to a Louisville correspondent,† Consul Brittain, of Nantes, writes, on September 6, 1898, that there ought to be a market in France for American dried apples. He calls attention to the new reciprocal treaty with France, under which dried apples and pears are dutiable at the rate of 1.50 francs (about 29 cents) per 100 kilograms (220.46 pounds), in place of the old rate of 4 francs (77 cents) per 100 kilograms, and says the apple crop in France is very light.

Mr. Brittain also adds that the tariff on staves is only about 15 cents per 100 kilograms, and suggests that American stave manufacturers turn their attention to France.

Ivory in Antwerp.—Consul-General Lincoln, of Antwerp, under date of August 4, 1898, says:

The third quarterly sale of the year was held on August 2, the usual buyers being present. The ivory offered was as follows:

Kongo:	Pounds.
Hard	58,201
Soft	3,968
Angola	13,448
Gold Coast	200
Benguela (soft)	2,403
Total	78,220

There were also 55 pounds of hippopotamus tusks.

In August, 1897, 157,478 pounds were offered; in 1896, 117,451 pounds; and in 1895, 136,685 pounds.

The demand was active, the prices generally having risen about 10 per cent. The stock on hand this day is about 174,628 pounds, as compared with 154,322 pounds in 1897, 125,662 pounds in 1896, and 317,462 pounds in 1895. The next sale will probably take place on the 31st day of October.

In submitting this report, I desire to acknowledge my sense of indebtedness to Messrs. H. & G. Willaert, of this city, who have been kind enough to furnish me with the information for this as well as for those previously made.

Commercial Conditions at Barmen.—Under date of August 27, 1898, Consul Bouchsein writes from Barmen:

With the exception of a few lines the United States tariff law of July, 1897, has not affected the exports to the United States from this consular district.

† To whom the original letter was forwarded.

There seems to be a fair market here for some of our American-made goods, such as steel in rods, building iron, locks, etc., if my countrymen would send solicitors who could talk to the people. The samples of steel shipped by the Crescent Steel Company, of Philadelphia, at my solicitation, to a large Barmen concern, have given the best satisfaction, and the manufacturer here has placed with that company a good sample order. This ought to open a market for steel rods in Barmen and the vicinity.

A Rochester firm has recently been so successful as to induce several German breweries to adopt its system of fermentation, and many more are to follow. This is especially gratifying, owing to Germany's claim to being the foremost brewing country.

New Cruisers in Stettin.—Consul Kehl writes from Stettin, July 11, 1898, that three Chinese steamers—the *Hai Young*, the *Hai Chew*, and the *Hai Shen*—and one German steamer—the *Hertha*—have just been completed at the dockyards there. Another German steamer, the *Hansa*, will be ready in about three months; and a cruiser for Japan is to be finished within the next eight months. The dimensions of the several steamers are given as follows: *Hertha*—tonnage displacement, 5,650; length, 358 feet (about); coal capacity, normal, 500 tons; total, 942 tons, horsepower, 10,000; speed, 18½ knots; carries 34 guns and 3 torpedo tubes. *Hansa*—tonnage displacement, 5,900; other details same as the *Hertha*. The Chinese steamers have a uniform tonnage displacement of 3,000; length, 328 feet; coal capacity, normal, 220 tons; total, 530 tons; horsepower, 8,000; speed, 20.7 knots; carry 24 guns and 3 torpedo tubes. The Japanese cruiser has a displacement of 9,870 tons; length, 528 feet; coal capacity, normal, 600 tons; total, 1,100 tons; horsepower, 15,500; speed, 20 knots; carries 35 guns and 5 torpedo tubes. The new Hamburg American steamer now being built is to be completed in 1900, and will exceed in dimensions the *Kaiser Wilhelm der Grosse*, having a displacement of 23,050 tons, a length of 662 feet, coal capacity of 5,000 tons, 33,000 horsepower, and a speed of 23 knots.

War Vessels of German Build.—Consul Frankenthal writes from Berne, September 14, 1898:

Since 1895, German shipbuilders have delivered 24 war vessels for other maritime powers, as follows: China, 3 armored cruisers, 5 torpedo-boat destroyers, and 6 torpedo boats; Brazil, 2 torpedo-boat destroyers; Turkey, 1 torpedo-boat destroyer; Austria, 1 torpedo

boat and 1 torpedo-boat destroyer; Norway, 3 torpedo boats and 1 torpedo-boat destroyer; Sweden, 1 torpedo boat.

At present, there are orders to be filled for 22 vessels, divided in this manner: Brazil, 1 torpedo-boat destroyer; Japan, 8 torpedo boats, 1 torpedo-boat destroyer, and 1 armored cruiser; Italy, 4 torpedo-boat destroyers; Russia, 4 torpedo-boat destroyers and 3 large cruisers. The value of the armored cruiser ordered by Japan is given at 13,000,000 marks ($3,094,000), and that of the three large cruisers ordered by Russia 24,000,000 marks ($5,712,000).

Electric Roads in Germany.—Consul Liefeld, of Freiburg, writes to the Department that he has received a number of letters in regard to the proposed electric railway in that city, which he had described in a letter to the Scientific American. Consul Liefeld wrote that Freiburg was about to open bids for the construction of an electric railroad system and a central power station for electric light and locomotive power, and urged United States manufacturers to compete. The technical newspapers of Great Britain have taken the action of Mr. Liefeld as a text for comment upon the energy of the United States consular service as compared with the inattention of the British consuls.

Mr. Liefeld adds that Germany is doing a great deal in the line of electric railroads at present. In a recent Berlin paper, the claim was made that there were 707 miles of electric road in Germany to 715 miles in all the rest of Europe, and that in Germany there were 2,492 electric cars, against 2,021 in all the other countries of Europe.

Higher Education in Saxony.—Consul Monaghan sends from Chemnitz, August 31, 1898, a report upon the "further-developing" schools of Saxony. With a population of 3,783,014, the kingdom has 1,953 of these schools, with 75,358 boys and 1,699 girls in attendance. Besides these, there are 39 higher industrial schools, with 10,660 scholars; 112 industrial technical schools, with 10,119 scholars; 44 commercial schools, with 4,781 scholars; 11 agricultural schools, with 691 scholars; 7 schools of all kinds of work for girls, with 1,569 scholars; and 18 technical schools for girls, with 2,445 scholars. Saxony's wonderful wealth, continues Mr. Monaghan, her industrial greatness, and the fact that she sends out to other parts of the world millions of dollars' worth of all kinds of wares, toys, textiles, tools, and machines, attest the importance of these schools. To ex-

plain just what is meant by the term "further developing," the consul adds that the system of common-school education under which boys and girls were given an ordinary training up to their fourteenth year was found inadequate. Compulsory education was established for graduates of the common schools. The hours of attendance are early in the morning or a certain number of afternoons each week. Manufacturers, merchants, etc., are made responsible for the attendance of the boys in their employ, and the latter make a special study of the trade in which they are occupied.

The full text of Consul Monaghan's report has been transmitted to the Bureau of Education.

Workingmen's Houses in Germany.—Vice-Consul J. F. Monaghan writes from Chemnitz, August 15, 1898:

There is a movement on foot to furnish workingmen with better tenements. Now, they are crowded into buildings which often look like barracks. The proposed houses will be built upon lots about 16½ feet wide by 102 feet deep, thereby allowing for a front yard for flowers and a back yard for a vegetable garden and shed, the latter for the keeping of poultry or some domestic animal. The houses will contain five rooms. A parlor and kitchen will be on the first floor, the parlor containing a porcelain stove and heating pipes, and the kitchen a wash boiler and stove. The three bedrooms on the second floor will easily hold five or six persons, and can be made to accommodate ten. In the largest an iron stove will be placed. A pump will provide water where the city waterworks do not extend to the house. In connection with the shed is a water-closet. The cost of such a house and lot, when a number are built at a time, will be between $850 and $950. It will rent for about $53 a year—that is, for the same price the workingman has to pay for two rooms in the barrack-like tenements of the large cities.

Condition of Labor in Belgium.—Consul Roosevelt, of Brussels, on August 10, 1898, says:

There is increased activity in nearly all industries in Belgium. Coal mines are employing extra hands, and nearly all of the quarries are working full force. In the industries of metal working, manufacture of arms and glass, conditions are excellent. The work in tanneries is normal, and there is a decrease in the clothing industry. Although there were strikes in the furniture industry at Malines during the past two months, the situation has been regulated and

the trade is now in full activity. The diamond-cutting industry is in an unfortunate state, the strikes still continuing. Linen and cotton spinning is active, but, on account of employment of female labor, there is much idleness among male spinners.

New Canal in Germany.—The following, bearing date of September 9, 1898, has been received from Consul Monaghan, of Chemnitz:

At a time when so many people are talking about the importance of building a canal through some part of Central America to connect the Atlantic with the Pacific, it may be interesting to know that the Germans attach great importance to canals and water ways as factors in industrial development. Their latest effort is to cut through the territory between the Elbe and Rhine, uniting those two rivers and permitting not only of the direct passage of ships from one to the other without unloading, but allowing the Rhine boats to carry cargoes gathered in the harbors of the North Sea to places far inland. This will save freight and cost of reloading.

Coal as Motive Power in Germany.—Consul Monaghan writes from Chemnitz, under date of August 30, 1898, of the significance of the large coal output of Germany. Germany is keenly appreciative, he says, of the value of her coal in the development of her industries. Many complaints have been made by the manufacturers against the coal trusts, and it is likely that a movement will be made against them should they prove, as the manufacturers claim they are, a menace to national prosperity. In 1897, the production of coal in Germany amounted to 98,850,000 tons. The motive power used in the Empire has increased more than threefold in the past twenty years, and amounts at the present time to 3,421,194 horsepower, equal to the energy of more than 82,000,000 men.

Beet Cultivation in Russia.—With reference to the cultivation of beets in Russia, Consul-General Holloway, writing from St. Petersburg, August 16, 1898, says:

According to official information, the area under beet cultivation on May 17, in European Russia, amounted to 1,083,758 acres, against 996,024 acres in 1897 and 873,728 acres in 1896, *i. e.*, more by 87,734 acres or 8.8 per cent and 2,100,330 acres or 24 per cent, respectively. The following table shows the number of acres planted in beets

belonging to sugar factories and to beet plantations in European Russia and eastern Siberia:

Government.	Factories.		Plantations.		Total.	
	1897.	1898.	1897.	1898.	1897.	1898.
	Acres.	*Acres.*	*Acres.*	*Acres.*	*Acres.*	*Acres.*
Southwestern	162,267	162,802	418,932	458,568	581,199	621,370
Central	192,469	201,461	110,187	139,679	302,656	341,140
Vistula	5,978	5,837	106,191	115,411	112,169	121,248
Total in European Russia	360,714	370,100	635,310	713,658	996,024	1,083,758
Eastern Siberia	405	202	394	162	799	364
Grand total	361,119	370,302	635,704	713,820	996,823	1,084,122

Flax and Hemp Crop of Russia.—Under date of August 25, 1898, Consul-General Holloway reports from St. Petersburg that the total harvest of flax fiber in all the governments of Russia was smaller by 3.9 per cent than the yield in 1896, although the area under flax increased 1.6 per cent; 2,612,268 acres of land being under flax in 1897, with a yield of 290,913 tons. The harvest of hemp decreased in 1897 by 117,126 tons, and in 1896 by 104,220 tons. The decrease is due to unfavorable conditions prevailing, as the area under hemp was very little less. The full text of the report, giving details as to the harvest, etc., in the various governments, has been sent to the Department of Agriculture.

Hop Crop in Great Britain.—Consul Halstead writes from Birmingham, under date of September 20, 1898, that, according to a leading member of the Hop Growers' Association, the British hop crop this year will amount to only 350,000 cwts. It is further estimated that the Continent will produce 730,000 cwts. (15 per cent less than last year), and that the world's production will be 1,450,000 cwts. The world's consumption is variously calculated at from 1,625,000 to 1,845,000 cwts., so that there will be a deficiency of between 300,000 and 400,000 cwts. It is obvious that prices will be good, especially as stocks are lower than at any time since 1892. The full text of the report has been transmitted to the Department of Agriculture.

Cooperative Cheese Association in Belgium.—Consul Roosevelt writes from Brussels, August 23, 1898:

It is very probable that in the near future milk dealers and cheese makers in this country will form a cooperative association for the

manufacture of cheese, as they are of the opinion that cooperation will sensibly diminish general expenses and permit manufacturers to offer a superior and more uniform article to the consumer. It is proposed, by reason of the relatively simple management of cheese dairies, to confide their direction to women suitably educated for this work. Besides technical instruction, a knowledge of bookkeeping and a competent understanding of dairy work will be required of applicants.

Annexed to the Government agricultural and industrial school at Overyssche is a cheese dairy school especially adapted to the requirements of complete instruction in cheese making. It is under the management of expert instructors and is admirably equipped.

Danish-American Steamship Service.—Vice-Consul Blom writes from Copenhagen, under date of August 19, 1898:

The Thingvalla Steamship Company,* Limited, of Copenhagen, running steamers between New York and Copenhagen, will cease to exist on October 1 next, when this line of steamers will pass over to the United Steamship Company, Limited, of Copenhagen

This must be considered an extremely satisfactory arrangement, as it will undoubtedly tend to increase the trade, which has already assumed comparatively large proportions, between Denmark and the United States. Two new steamers for the New York route, of 7,000 and 7,400 tons displacement, are being built and are nearing completion. They will be delivered this fall by the British shipbuilders.

Kyao-chau Declared a Free Port.—Ambassador White writes from Berlin, September 7, 1898, that in the Imperial Gazette of September 5 there appeared a notice to the effect that, according to a telegram from the governor, Kyao-chau was declared a free port on the 2d instant.

The semiofficial Berliner Politische Nachrichten, says Mr. White, comments as follows:

> The development of the German Chinese policy has already shown sufficiently that German endeavors, to which expression was given at the time of the occupation of this point on the Chinese coast, were widely separated from ambitious aspirations, and that the object sought by the settlement in the Bay of Kyao-chau was merely to obtain a permanent base for Germany's politico-commercial requirements in East Asia. With the declaration that Kyao-chau is to be a free port, a

* See CONSULAR REPORTS No. 210 (March, 1898), p. 449, and No. 213 (June, 1898), p. 236.

pledge is given that it is far from Germany's policy to endeavor to advance her interests in East Asia along any other lines than those of international justice and equity. Germany's mind is bent upon peaceful contests alone, and consequently she has not delayed demonstrating, by action by Kyao-chau, that she will not be influenced in the development of the place by any other views than those which are in complete accord with her perception of her obligations as a civilizing force in the East.

Electric Lamps in Yokohama.—In answer to a request from a New York export association* for information as to prices of and agencies for the sale of incandescent electric lamps in Japanese markets, Consul-General Gowey sends the following from Yokohama, dated September 1, 1898:

Almost every prominent American and European manufacturer of these goods is represented here either by specially appointed agents or by correspondents.

The Edison-Swan Company (British), Siemens & Halske, Severin Senator, and the General Electric Company (German) may be mentioned as leading European concerns here who, by their agents, are making strong efforts to secure a large share of the trade.

German 16-candlepower lamps, guaranteed for 1,000 hours, have been offered here for 6d. (12 cents) apiece. American and other lamps of the same quality are now selling here for 32 sen (16 cents in United States currency) each. This unusually low price is the result of over competition, and will probably be of short duration.

Japanese Fur-Seal Industry.—Consul-General Gowey, of Yokohama, sends, on August 2, 1898, the following clipping from the Japan Times in regard to the fur-sealing traffic in Japanese waters:

The latest returns of the fishery bureau for the last five years give the following list of vessels engaged in fur sealing in Japan and the value of the catch for each year, as follows:

Year.	Vessels.	Fur seals.	Value.	
			Yen.	
1892	10	3,710	55,650	$27,825.00
1893	76	40,656	609,840	304,920.00
1894	78	48,993	734,895	367,447.50
1895	22	18,979	284,685	142,342.50
1896	28	17,677	265,155	132,577.50
1897	16	8,852	132,780	66,390.00
Total	220	138,867	2,083,005	1,041,502.50

*Advance Sheets have been sent the inquirer.

Americans in China.—Consul Ragsdale, of Tientsin, under date of July 9, 1898, speaking of the arrival of the new United States minister, Mr. Conger, mentions the general popularity of Americans in China. Expressions of friendship for our people, he says, are heard in official and business circles. He notes a contract just made by a representative of the Government with Mr. Difenderfer, of Philadelphia, for the purchase of all machinery necessary to establish an up-to-date woolen mill at Tientsin. The electric machinery will come from the Westinghouse Electric Company, of Pittsburg; the boiler and engines from the Harrisburg Foundry and Machine Company; and the remaining machinery from the James Smith Woolen Machine Company, of Philadelphia.

Need of Commercial Directories in China.—Consul-General Goodnow writes from Shanghai, August 8, 1898:

I desire to suggest to chambers of commerce and boards of trade of the United States the desirability of keeping on file in American consulates in China, and especially in this one, copies of the commercial directories of their cities. I am often applied to for lists of firms handling specific lines. For example, a German located at Kyao-chau Bay asked for a list of lumber firms on the Pacific coast. I have nothing from which such information can be obtained. Such inquiries are frequent.

American Enterprise in British Honduras.—The following, bearing date of Belize, August 24, 1898, has been received from Consul Avery:

I would report the completion and opening of the new post-office in Belize, a handsome two-story building which has been erected at an expense of $8,000 by an American contractor and largely by American labor. The brick, lumber, roofing, and all material are from the United States; and the boxes, desks, and fixtures furnished by the Keyless Lock Company, Indianapolis, Ind., are a good advertisement of American office furniture, which is gradually displacing the massive mahogany desks, chairs, and tables so much in use here.

Another fine brick edifice, St. Mary's School, which is nearing completion, will probably be equipped with American school furniture. This will be an innovation here, for all the schools are fitted with the old-fashioned desks and "forms," as used in the English schools.

Mining in Canada.—Commercial Agent Beutelspacher sends from Moncton, August 19, 1898, a synopsis of the Canadian Mining Annual for 1898. The book, he says, is a 600-page digest of information relating to the history, organization, and operation of all Canadian collieries, metal mines, blast furnaces, and smelting works, compiled from the most authentic sources, with introductory notes and official statistics.

The book shows that mining enterprises in Canada are on the increase. The geological survey places the total value of the mineral output for 1897 above $28,000,000, or an increase of $6,000,000 over the previous year. The output is divided as follows among the principal mining Provinces: British Columbia, $10,455,268; Nova Scotia, $6,000,000; Ontario, $5,000,000; Quebec, $2,063,266; Northwest Territories and Yukon, $3,000,000.

Tariff Changes in the Argentine Republic.—Minister Buchanan telegraphs from Buenos Ayres, September 23, 1898:

According to a law passed by the Argentine Congress yesterday, in force from now until December 31, customs duties are increased as follows: Ad valorem duties of 5 per cent and under, doubled; those above 5 per cent, subject to 10 per cent additional, and 10 per cent on customs law; value of article added on all specific duties.

The following are among the articles that come under the 5 per cent ad valorem classification in the Argentine tariff: Cork, jewelry, wire, twine, tin in sheets; iron, zinc, and lead in ingots or bars; sewing machines and parts, tar oils, quicksilver, machinery for installation of electric plants or waterworks (except meters and electric fixtures), fire bricks and clay, wool-clipping machines, steam motors, gold and silver watches and plate, agricultural machinery, and wool yarn. Under the 2½ per cent rate come cotton in bales, zinc in sheets, wood pulp, hops, rabbit hair, gelatin, etc. Specific duties are charged on provisions, drinks, tobacco, collars and cuffs, hats and hat felts, matches, kerosene, grain bags, playing cards, stearin, linseed oil, etc.

Additional Import Tax in Uruguay.—Consul Swalm writes from Montevideo, July 27, 1898:

Beginning with August 1, an additional permanent tax of 2½ per cent on all imports into Uruguay is again in force. The proceeds are at first to be applied to the payment of outstanding treasury certificates, which are ten months behind, and will afterwards be

devoted to the proposed harbor improvements. The tax is of especial significance to Americans interested in the exportation of lumber and refined oil, upon which the duty is already very heavy.

Supplies here are very light, shipments having been retarded on account of the war with Spain.

Increase of Duties in Nicaragua.—Consul Sorsby writes from San Juan del Norte, September 14, 1898:

I have to report that on August 30, 1898, import duties on liquors, dry goods, and several other staple articles were advanced about 100 per cent. This new tariff decree has not been received by me; therefore, I am unable to give it in detail.

New Tariff and Harbor Regulations in Japan.—Minister Buck writes from Tokyo, September 12, 1898, that he has received a note from the Japanese Minister of Foreign Affairs to the effect that the new customs tariff law* will be enforced throughout the whole of the Japanese dominions from the 1st of January, 1899.

Under date of September 10, Mr. Buck says that the new harbor regulations† will be enforced at the port of Yokohama from the 10th of October, and at Kobé and Nagasaki from the 1st of November, 1898.

Commercial Code and Treaties in Japan.—Minister Buck has informed the Department of State, in a note written from Tokyo, July 28, 1898, that Japan put in force the revised civil code and the commercial code, beginning with the 16th of July. On July 17, 1899, all the revised treaties with foreign countries will become effective; it having been stipulated that the codes should be in operation twelve months previously.

Railway Material Wanted in Australia.—On September 9, 1898, Consul Halstead sends the following from Birmingham:

The London correspondent of the Birmingham Daily Post states that information reaches him from an official source that the Victorian and South Australian governments will invite tenders for

---

*See CONSULAR REPORTS No. 204 (September, 1897), p. 91.

†See CONSULAR REPORTS No. 217 (October, 1898), p. 255.

railway material in the course of October, and that the material, including rails and girder work, is intended for relaying government lines and the development of the agricultural districts.

I assume that these British colonies do not limit bids to citizens of Great Britain.

Jute Crop of India for 1898.—Consul-General Patterson writes from Calcutta, July 28, 1898:

I will state for the information of manufacturers, dealers, and consumers of jute that the first forecast of the department of land records and agriculture, in the province of Bengal, where jute is principally cultivated, shows a decrease in the area cultivated amounting to 477,300 acres (22 per cent), due partially to the deficiency of rain during the sowing season and partially to the low price of jute last year and the high price of rice, which have induced the cultivators to grow the latter crop in preference to jute. It may be roughly estimated that this year's yield will amount to 90 per cent of a normal crop.

New Railroad in Mexico.—Consul Thompson, writing from Progreso, August 22, 1898, says:

The States of Yucatan and Campeche are now united by railroad. The inaugural ceremonies, which took place July 29, 1898, were very imposing, and the banquet which followed was presided over by the Minister of Justice for Mexico, acting for President Diaz.

The conclusion of this railway marks an important era for both States.

High Price of Coal in France.—Consul Jackson writes from La Rochelle, August 18, 1898, that, owing to the labor troubles in England, the price of coal has increased enormously. Retail prices range from 45 to 50 francs ($8.685 to $9.65) per ton, and there is an increasing anxiety on the part of public men concerning the supply for the coming winter. He is informed that American coal would be acceptable at La Rochelle.

Adjustment of Trade Differences with Germany.—Consul Monaghan writes from Chemnitz, under date of August 6, that the Prussian chambers of commerce have called for expressions of opinion from the mercantile classes on the best action to be taken in regard to an adjustment of the tariff situation in its bearing upon

the United States. Present indications show an opposition to any careless tariff war, and those whose interests are most deeply affected are hoping for a settlement of disputed points in as friendly a manner as possible.

Large Hay Crop in Germany.—Consul Hughes writes from Coburg, August 29, 1898:

I would respectfully suggest that a warning be given to American grass raisers and dealers, that they should not ship hay in any shape on consignment to this part of the German Empire, as the crops of all kinds of grasses have been enormous, and to consign for sale here will not only entail the loss of the hay, but heavy additional expenses.

Opposition to American Pork in Italy.—Consul Cramer sends from Florence, under date of August 8, 1898, an article published in a Bologna newspaper to the effect that the manufacture of pork and its different products, formerly so remunerative in Italy, has for some years met with powerful competition from foreign manufacturers, especially American. At a meeting of Bolognese salted-meat sellers it was resolved to ask the Government to alter the tariff laws now in force relating to the importation of hog products from the United States.

Animals in Switzerland.—Under date of September 21, 1898, Consul Frankenthal, of Berne, says that according to the figures for 1896, just published, there are 1,306,696 cattle, 566,974 hogs, 415,817 goats, 271,901 sheep, and 108,969 horses in Switzerland. The number of cattle increased 32 per cent in the last thirty years. From 1892 to 1895 the import and export of cattle showed the following yearly average: Imports—oxen, 45,695; bulls, 4,490; cows, 7,456; heifers, 5,763; calves, 14,922; exports—oxen, 456; bulls, 2,105; cows, 18,711; heifers, 11,505; calves, 14,641. The import of horses is steadily increasing, the average during the three years under consideration being: Horses, 6,455; colts, 1,221; mules, 3,125; donkeys, 1,740. The full text of Consul Frankenthal's report has been sent to the Department of Agriculture.

Poultry and Eggs in Russia.—A report from Consul-General Holloway, of St. Petersburg, dated September 21, 1898, says that Russia has made rapid progress in the poultry and egg industry, which now occupies the fifth place in value of her exports, repre-

senting $11,587,500 in 1894. Pheasants are successfully bred, and geese find a ready sale in foreign markets. Shipments are made to Berlin, Vienna, Paris, and London. The report in full has been transmitted to the Department of Agriculture.

Women Employed in German Trade.—Consul Monaghan, of Chemnitz, under date of September 9, says that there are 579,608 women engaged in trade in Germany, the number having doubled during the last thirteen years. All branches of industry show an increase in this line of employment, the higher classes of labor even more than the lower ones. The greatest gain, however, is apparent in commerce, the percentage of women in this line being 1 to 4. The full text of Mr. Monaghan's report has been transmitted to the Department of Labor.

Treatment of Tetanus by Cerebral Injection.—Consul Skinner reports from Marseilles, September 12, 1898, an operation in the city hospital. The patient's skull was trephined in both hemispheres, and a serum prepared by Dr. Roux, of Paris, was introduced into the brain. The operation lasted forty minutes, and five minutes after its completion the patient was able to respond intelligently to questions and seemed at first to be doing well. After four days, however, he died. The newspaper discussion of the affair brought out a statement from a physician at Agde that in July last, under circumstances requiring heroic treatment, he had performed the operation very successfully, the patient being out of danger in five days.

The full text of Consul Skinner's report has been transmitted to the Marine-Hospital Service.

Branch Post-Offices in Brussels.—Under date of August 26, 1898, Consul Roosevelt, of Brussels, says:

Besides the main post-office and telegraph building of Brussels, there are twenty-four subpost-offices distributed in various parts of the city and suburbs, located in buildings either rented or owned by the Government. Cafés and liquor shops are excluded. Persons intrusted with these offices receive an annual salary of from 200 to 400 francs ($38.60 to $77.20), besides a stipulated percentage on the amount received from the sale of stamps, postal cards, and money orders.

Telephone between Berlin, Brussels, and Paris.—Consul Roosevelt, of Brussels, under date of August 17, reports that work is to be begun on a telephone line between Berlin, Brussels, and Paris. When completed, says the consul, the line will be more than 621 miles long, and the most important in Europe.

Entry of Jews into Palestine Prohibited.—A note from the legation of Turkey, dated Washington, September 9, 1898, informs the Department that the entry of foreign Israelites into Palestine is prohibited, and that the imperial authorities have received orders to prevent the landing of Jewish emigrants.

Consular Reports Transmitted to Other Departments.—The following reports from consular officers (originals or copies) have been transmitted since the date of the last report to other Departments for publication or for other action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
J.C. Monaghan, Chemnitz..	Aug. 17, 1898	Wages and tenements in Germany.	Department of Labor.
Do.....	Aug. 16, 1898	Workingmen's houses in Germany.	Do.
Do.....	Aug. 31, 1898	Schools in Saxony.....	Bureau of Education.
Do.....	Aug. 30, 1898	Efforts to improve laboring classes in Germany.	Department of Labor.
Henry W. Gilbert, Liege...	Aug. 25, 1898	Telegraphy without wires...	Navy Department.
G. W. Roosevelt, Brussels..	Sept. 1, 1898	Infested beehives in Belgium.	Department of Agriculture.
Do.....	Aug. 10, 1898	Condition of labor in Belgium.	Department of Labor.
A. D. Dickinson, Nottingham.	Sept. 7, 1898	Agricultural experiments...	Department of Agriculture.
J. M. Ayers, Rosario.....	June 16, 1898	Locust investigation commission.	Do.
R. P. Skinner, Marseilles...	Sept. 12, 1898	Treatment of tetanus by cerebral injection.	Marine-Hospital Service.
William R. Holloway, St. Petersburg.	Sept. 21, 1898	Poultry and eggs in Russia..	Department of Agriculture.
Marshal Halstead, Birmingham.	Sept. 20, 1898	British hop crop.....	Do.
A. L. Frankenthal, Berne..	Sept. 21, 1898	Animals in Switzerland.....	Do.
W. P. Atwell, Roubaix.....	Sept. 19, 1898	Wheat harvest of 1898.....	Do.
W. H. H. Graham, Winnipeg.	Sept. 26, 1898	Manitoba wheat crop for 1898.	Do.

FOREIGN REPORTS AND PUBLICATIONS.

Mines and Industries in Peru.—The following extracts are from a British Foreign Office report (annual series 2117):

GOLD.

The late discoveries of quartz and placer gold mines in the districts of Sandia and Carabaya have induced many persons to prospect during the year; but as a rule they express themselves disappointed on their return, chiefly owing to the many difficulties they have to contend with outside of the natural ones arising from want of roads and the action of the local authorities, who do not seem to encourage the development of that part of the country as they should. Revolvers and shotguns are admitted, but no rifles. Those who come as pioneers, with the intention of going to an entirely unexplored region abounding in savages and wild beasts, naturally want better arms to defend themselves with than revolvers and shotguns. Again, when the explorers get to the confines of civilization and reach their starting point for the further interior where gold is found, they fall into the hands of men who speculate on the labor of the Indians. The houses of the labor contractors are probably the only ones inhabitable in the village, and there travelers are obliged to stay, for a consideration, generally about ten times what it should be. To them you must apply for Indians, mules, llamas, or donkeys to carry your provisions, etc., a part of the way in (beyond a certain point it will not admit of animals), and, as no Indian will dare treat direct with a foreign traveler, these contractors will put every obstacle in the way of procuring Indians and animals, so as to prolong the stay in the village. The Indian will receive, say, 1s. (24 cents) a day from the contractor for the services of himself and his animal, and the traveler will have to pay at least 4s. (97 cents) a day to the contractor; and at length, when able to start, so many days' hire of the Indians must be paid in advance. All this makes an expedition in search of gold too expensive to be undertaken by the class of men best able to accomplish the object of developing an unexplored country, on the chance of some good finds of the precious metal. Still, there is no doubt that gold in large quantities exists in these regions, or that when once the primary difficulties have been overcome, capital will flow in with every prospect of a beneficial return.

COPPER.

Veins of copper, abundant and rich, have been found in the Cerro de Pasco silver mines. Ores containing 30 to 40 per cent of copper are remitted in their crude state to Lima for shipment to Europe, those of lower grade being deposited until furnaces can be built to concentrate them. The copper industry would be very profitable should the railway from Oroya be continued to this place, or a light line constructed. The distance is about 65 miles, over level country, and the cost would be small. The quantity of ore that might easily be produced would be at least 2,000 tons per month. The capital required to carry out this work would not be large and would be a very good investment.

COAL.

An American syndicate has sent engineers to this country to make a survey for constructing a line which the concessionnaires propose to build from Pacasmayo to the province of Hualgayoc, where, it is reported, extensive beds of anthracite and semibituminous coal exist. According to Mr. C. Clinton Gardner, a well-known American engineer, 10,000,000 tons are within easy reach, and the supply is almost inexhaustible. He estimates that 2,000,000 tons could be extracted yearly and delivered at the port at a cost of $2 gold per ton. The construction of the line and purchase of rolling stock are estimated to cost $3,000,000. The line is to start from Pacasmayo or Cherrepe, the total distance from the coast to the coal strata being about 121 miles. A line is already in existence from Pacasmayo to Yonan, 41 miles.

PETROLEUM.

There are three companies engaged in extracting this article in the department of Piura—one British, one Italian, and one French; the capital invested is estimated at from $2,000,000 to $2,500,000. The British concession covers 600 square miles, and the output averages 800 tons a month of crude oil. This is pumped (no flowing wells existing) into a deposit tank with a capacity of 15,000 barrels, and thence through a pipe to the tanks at the seashore, where it is loaded directly into the vessels. The Italian company has wells yielding some 1,200 tons per month. The French company has only six wells, the work being yet in its infancy. The kerosene can not compete in quality with that produced in the United States, the crude oil being of an asphaltum nature.

INDUSTRIES.

A manufactory of cotton goods, principally unbleached, and another for woolen fabrics have been opened during 1897, the former, worked by water power, at a place called the Huaico, on the road to Arequipa, and the latter in the city itself. Both are turning out good work and are able to compete successfully with European manufactures, but the output is small as yet and has not sensibly affected importation of similar articles from Europe and the United States. Cuzco, a city of about 20,000 inhabitants, situated 400 miles in the interior, has also a large manufactory for woolen cloths, blankets, etc., which supplies, in a great measure, the Indians around that district and also sends parcels to Puno and Arequipa. Although not of fine quality, these goods are of pure wool and well suited for the climate of the interior towns that, ranging at from 8,000 to 12,000 feet above the level of the sea, are sufficiently cold to require warm clothing.

Tariff Changes in Russia.—A British Foreign Office report from St. Petersburg quotes a recent order of the Russian customs department, to the effect that oatmeal known under the names of "Hercules" and "Champion" shall be admitted under section 4 of the tariff, duty 1.15 rubles or 1.30 rubles (59.1 or 66.8 cents) per pood (36.112 pounds), according to the nature of the packing.

Iron and steel rails for railway, tramway, and electrical tracks shall be cleared, respectively, under point 2 of sections 140 and 142 (dealing with wrought iron and steel) of the customs tariff, irrespective of the form of their transverse section. Duty, 50 copecks (25 cents) per pood (36.112 pounds).

Another Foreign Office report says that the following goods are to be admitted free during the navigation seasons 1898 to 1903, at the mouths of the rivers Ob and Yenisei, in Siberia:

(*a*) Salt, coal, agricultural implements and machines with spare parts and appurtenances, without limitations as to nature, number, and weight.

(*b*) Machines with spare parts and appurtenances destined for use in Siberia in factories, works, and mechanical workshops of every description, with the exception of machines and parts of the same required for steamers.

(*c*) Fishing nets and yarn.

(*d*) Cyanide of potassium and chloride of lime.

(*e*) Tin plate, tin, and olive oil; but only in quantities required by special fish-preserving enterprises.

(*f*) Bags of all kinds for the exportation of grain at the mouths of the above-mentioned rivers, but within the limit of such exportation.

All of the above articles, with the exception of those mentioned under *a*, are destined for use exclusively in Siberia, and if brought into European Russia are subject to the general tariff.

Brick tea is to be admitted during the navigation seasons of 1898 and 1899 at the mouth of the River Ob at a duty rate of 4.50 rubles ($2.31) per pood, and at the mouth of the Yenisei at 4 rubles ($2.05) per pood.

Production of and Trade in Ivory.—The Moniteur du Officiel Commerce, Paris, March 17, 1898, has the following:

The greater part of the ivory imported into Europe comes from different regions of Africa; British India and Ceylon furnish a comparatively small quantity. Africa contributes about 800,000 kilograms (1,763,680 pounds) of ivory annually, distributed among the different centers of exportation as follows:

From—	Quantity.	
	Kilograms.	*Pounds.*
Zanzibar	200,000	440,920
Mozambique	100,000	220,460
Gabon, Cameroon, Lagos	75,000	165,345
Niger	75,000	165,345
Loanda, Benguela	100,000	220,460
Cape Colony	50,000	110,230
Egypt	150,000	330,690
Coast of the Red Sea	50,000	110,230
Total	800,000	1,763,680

The principal markets for ivory in Europe are London, Liverpool, and Antwerp. Hamburg also carries on an important trade, but a great part of it has first passed through the London market. Of the ivory imported at Antwerp, the larger part

is from the Kongo Free State. The following table will give an idea of the uses to which manufactured ivory is put, in the principal countries, each year:

Country.	Knife handles.	Piano keys.	Combs.	Billiard balls.	Different articles.	Total.
	Pounds.	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*	*Pounds.*
England	315,258	24,251	35,274	19,841	13,228	407,852
America	24,251	136,685	46,297	28,660	41,887	277,780
Germany	28,660	125,662	50,706	26,455	17,837	249,320
France	19,841	63,973	68,343	30,864	15,432	198,453
Other countries	2,205	.....	.....	2,205	8,818	13,228
India	.....	.....	.....	.....	266,757	266,757
China	.....	.....	.....	.....	28,660	28,660
Total	390,215	350,571	200,620	108,025	392,619	1,442,050

France, England, Germany, and the United States manufacture the four principal articles in ivory, viz, billiard balls, piano keys, comb and knife handles; in addition, France makes a specialty of brushes, fancy articles, handles of umbrellas, and carved goods. Spain manufactures a considerable quantity of billiard balls; Italy and Turkey, combs; Austria, billiard balls and keys; Holland, a very few balls; and Belgium, some fancy and carved goods.

American Agricultural Machinery in England.—A correspondent writes to the British Trade Journal, asking why American makers have such a grip on rural districts in England with agricultural machinery. Happening to be in Derbyshire during the summer, he had examined the implements used on the farms and found that a large proportion of their purchases came from the United States. The hay cutters, tedding machines, rakes, and hay forks were American, although, adds the correspondent, "forks, rakes, and the like are made by various large firms in the city of Sheffield not half an hour's railway journey off."

Petroleum in Dutch India.—The following is from the London and China Telegraph, London, September 5, 1898:

A correspondent in the Batavia Nieuwsblad discusses the adverse rumors about the "Royal" petroleum wells, and says that although every man of the staff has the most stringent orders not to write any particulars about the company's affairs, it is impossible to deny that seven great tank ships have been lying idle awaiting oil, and that two of these left the port in ballast; and it is also a fact, which anybody may verify for himself, that the figures at the toll office at Balballan give 9,000,000 liters (2,377,575 gallons) less exported in May and June than in the two previous months. There is a rumor that fifteen wells on the great oil vein have stopped yielding.

CONTENTS.

		Page.
I.—The Button Industry in Europe (Vienna, 481—Reichenberg, 483—Paris, 484—Berlin, 485—Barmen, 486—Freiburg, 486—Gera, 488—Birmingham, 491.)		481
II.—Competition with British Trade	*White*	491
III.—British vs. American Shipping Rates: Hindrances to American Exports	*Halstead*	508
IV.—Suggestions for United States Export Trade	*Piatti*	513
V.—"Country-Damaged" Cotton in England	*Boyle*	516
VI.—United States Products in Brazil	*Seeger*	520
VII.—Bicycles in Java	*Everett*	521
VIII.—Opportunities for American Trade in Germany	*Monaghan*	524
IX.—High Prices and Increased Meat Imports in Germany	*D. B. Mason*	528
X.—American Apples and the German Fruit Market	*F. H. Mason*	529
XI.—Fruit Market in Manitoba	*Graham*	533
XII.—Pulp and Paper Mill in Ontario	*Shotts*	534
XIII.—Mines in Ontario	*Shotts*	535
XIV.—Conditions in Dawson City	*McCook*	536
XV.—Nuts as Food in Foreign Countries (France, 537—Italy, 539—Korea, 546—Syria, 547.)		537
XVI.—Decortication of Pepper (England, 548—Netherlands, 549—Dutch India, 549—Straits Settlements, 550.)		548
XVII.—The City of Tientsin	*Ragsdale*	550
XVIII.—German Acquisitions in Shantung	*Fowler*	556
XIX.—New Chinese Mints	*Goodnow*	558
XX.—Trade of the Philippines in 1897	*Morris*	559
XXI.—Shipbuilding at Nagasaki	*Harris*	561
XXII.—Wheat Flour in Japan	*Gowey*	562
XXIII.—Japanese Hat Trade	*Gowey*	563
XXIV.—Revised Regulations for Inland Navigation in China	*Conger*	563
XXV.—Chinese Control of Railways and Mines	*Conger*	564
XXVI.—Length of Railways in Japan	*Gowey*	565
XXVII.—Railway Contract in Madagascar	*Gibbs*	566
XXVIII.—Steamship Communication with Rio de Janeiro	*Seeger*	570

Page.

XXIX.—Street Railways in Gothenburg.....*Bergh* 571

XXX.—Iron Mining and Wages in Sweden.....*Winslow* 573

XXXI.—Production and Sale of Iron in Russia during 1897..*Holloway* 575

XXXII.—English vs. American Iron Industry.....*Bergh* 579

XXXIII.—Docks at Queenstown.....*Swiney* 580

XXXIV.—A New Weaving Machine in France.....*Atwell* 581

XXXV.—Trade and Technical Education in Belgium.....*Morris* 583

XXXVI.—Export Bounties in Foreign Countries..... 584

(Argentine Republic, 584—Barbados, 584—Belgium, 585—British Honduras, 585—Chile, 585—China, 585—Colombia, 586—Ecuador, 586—France, 586—French West Indies, 586—Germany, 588—Haiti and Dominican Republic, 588—Japan, 588—Leeward Islands, 589—Miquelon, 589—Morocco, 589—Netherlands, 589—Nicaragua, 591—Paraguay and Uruguay, 591—Peru, 591—Russia, 591—Samoa, 592—Society Islands, 592—Sweden and Norway, 592—Switzerland, 593—Turkey, 593—Venezuela, 593.)

XXXVII.—German Studies of Malarial Disease.....*F. H. Mason* 593

XXXVIII.—New Nicaraguan Tariff.....*Murry* 596

XXXIX.—Mining Taxes in Venezuela..... } *Plumacher* 597

XL.—Colonization in Venezuela..... } *Plumacher* 598

XLI.—Port of Pointe a Pitre.....*Aymé* 599

XLII.—Constitution of United States of Central America...*Little* 601

XLIII.—Gunpowder in Brazil..... } *Furniss* 602

XLIV.—Carbons in Brazil..... } *Furniss* 604

XLV.—Manioba Rubber in Brazil.....*Clark* 606

XLVI.—Mangabeira Rubber in São Paulo.....*Rosenheim* 607

XLVII.—Coffee Growing in Paraguay..... } *Ruffin* 608

XLVIII.—Oranges in Paraguay: Suggestions to Immigrants.. } *Ruffin* 609

XLIX.—Acknowledgment to Consular Officers..... 610

L.—Canadian Trade with South Africa..... } *Stowe* 611

LI.—Imports into Natal..... } *Stowe* 612

LII.—Exposition in Western Australia: Industrial Conditions.. 614

LIII.—Activity of American Consuls.....*Halstead* 617

LIV.—Mountain Water Courses as Industrial Aids.....*Monaghan* 618

LV.—Notes (Imports of Hogs at Marseilles—Notes from Russia—Railways in Russia—Electric Roads in Rheims—American Furniture in England—Opening for Stamped-Steel Ceilings in England—Complaints of American Export Methods—Provincial Exposition at Ghent—Ballooning in Switzerland—Import of Plants Prohibited in New Zealand—Cheap Labor in Japan—Proposed Cement Trust in Japan—Electric Lamps in Kobé—Proposed Customs Union in South Africa—Immigration and

Page.

Postage for South Africa—Finances of Uruguay—Mechanics' Bank in Venezuela—Concession for Making Porcelain in Venezuela—Government Sugar Factory in Antigua—Financial Conditions in Guadeloupe—United States Shoes in Guadeloupe—Haitian Duty on Soap—Japanese Camphor Trade—Tobacco in China—Rice Crop of Japan—Good Wheat Crop of France—Labor in North France—Increase of Imports from Switzerland—Value of Railways in Sweden—Gold Shipments from Cape Colony—Trade Conditions in the Transvaal—Iron Works in New South Wales—Postal Savings Bank in Java—Exemptions from Duty in the Netherlands—Vancouver-Vladivostock Steamship Service—Amalgamation of Ontario Vinegar Manufacturers—Consular Reports Transmitted to Other Departments)..... 619

LVI.—FOREIGN REPORTS AND PUBLICATIONS (American Products in Japan—Trade and Industry of Principal Countries—American Manufactures in England—Trade Conditions in Brazil—Markets of Paraguay—Petroleum in Mexico—French Enterprise in Siberia—Foreigners in Japanese Enterprises)..... 633

REPORTS BY COUNTRIES.

	Page.
ANTIGUA:	
Government sugar factory in	627
ARGENTINE REPUBLIC:	
Export bounties of	584
AUSTRALIA, WESTERN:	
Exposition and industrial conditions in	614
AUSTRIA-HUNGARY:	
Button industry in Reichenberg	483
Button industry in Vienna	481
BARBADOS:	
Export bounties of	584
BELGIUM:	
Export bounties of	585
Provincial exposition at Ghent	622
Trade and technical education in	583
BRAZIL:	
Carbons in	604
Gunpowder in	602
Mangabeira rubber in São Paulo	607
Maniçoba rubber in	606
Steamship communication with Rio de Janeiro	570
United States products in	520
BRITISH HONDURAS:	
Export bounties of	585
CANADA:	
Amalgamation of Ontario vinegar manufacturers	631
Conditions in Dawson City	536
Fruit market in Manitoba	533
Pulp and paper mill in Ontario	534
Mines in Ontario	535
Vancouver-Vladivostock steamship service	631
CAPE COLONY:	
Gold shipments from	630
CENTRAL AMERICA:	
Constitution of United States of	601
CHILE:	
Export bounties of	585
CHINA:	
Chinese control of railways and mines	564
Export bounties of	585
German acquisitions in Shantung	556
New mints of	558
Revised regulations for inland navigation in	563
The city of Tientsin	550
Tobacco in	629

COLOMBIA: Page.
Export bounties of.... 586
DOMINICAN REPUBLIC:
Export bounties of.... 588
DUTCH INDIA:
Decortication of pepper in.... 549
ECUADOR:
Export bounties of.... 586
ENGLAND:
Activity of American consuls.... 617
American furniture in.... 621
"Country-damaged cotton" in.... 516
Decortication of pepper in.... 548
Opening for stamped-steel ceilings in.... 621
FRANCE:
A new weaving machine in.... 581
Button industry in Paris.... 484
Electric roads in Rheims.... 620
Export bounties of.... 586
Good wheat crop of.... 629
Imports of hogs at Marseilles.... 619
Nuts as food in.... 537
Suggestions for United States export trade.... 513
FRANCE, NORTH:
Labor in.... 630
FRENCH WEST INDIES:
Export bounties of.... 586
GERMANY:
American apples and the German fruit market.... 529
Button industry in Barmen.... 486
Button industry in Berlin.... 485
Button industry in Freiburg.... 486
Button industry in Gera.... 488
Complaints of American export methods.... 622
Export bounties of.... 588
German acquisitions in Shantung.... 556
High prices and increased meat imports in.... 528
Mountain water courses as industrial aids.... 618
Opportunities for American trade in.... 524
Studies of malarial disease.... 593
GREAT BRITAIN:
Competition with British trade.... 491
GUADELOUPE:
Financial conditions in.... 627
Port of Pointe a Pitre.... 599
United States shoes in.... 628
HAITI:
Duty on soap in.... 628
Export bounties of.... 588
IRELAND:
Docks at Queenstown.... 580
ITALY:
Nuts as food in.... 539

	Page.
JAPAN:	
Camphor trade of	629
Cheap labor in	624
Electric lamps in Kobé	625
Export bounties of	588
Hat trade of	563
Length of railways in	565
Proposed cement trust in	624
Rice crop of	629
Shipbuilding at Nagasaki	361
Wheat flour in	562
JAVA:	
Bicycles in	521
Postal savings bank in	631
KOREA:	
Nuts as food in	546
LEEWARD ISLANDS:	
Export bounties of	589
MADAGASCAR:	
Railway contract in	566
MIQUELON:	
Export bounties of	589
MOROCCO:	
Export bounties of	589
NATAL:	
Imports into	612
NETHERLANDS:	
Decortication of pepper in	549
Exemptions from duty in	631
Export bounties of	589
NEW SOUTH WALES:	
Iron works in	631
NEW ZEALAND:	
Import of plants prohibited in	623
NICARAGUA:	
Export bounties of	591
New tariff of	596
NORWAY:	
Export bounties of	592
PARAGUAY:	
Coffee growing in	608
Export bounties of	591
Oranges in: Suggestions to immigrants	609
PERU:	
Export bounties of	591
PHILIPPINES:	
Trade of, in 1897	559
RUSSIA:	
Export bounties of	591
Notes from	619
Production and sale of iron in, during 1898	575
Railways in	620

SAMOA: Page.
Export bounties of.... 592
SOCIETY ISLANDS:
Export bounties of.... 592
SOUTH AFRICA:
Canadian trade with.... 611
Immigration and postage for.... 625
Proposed customs union in.... 625
STRAITS SETTLEMENTS:
Decortication of pepper in.... 550
SWEDEN:
English vs. American iron industry.... 579
Export bounties of.... 592
Iron mining and wages in.... 573
Street railways in Gothenburg.... 571
Value of railways in.... 630
SWITZERLAND:
Export bounties of.... 593
Ballooning in.... 623
Increase of imports from.... 630
SYRIA:
Nuts as food in.... 547
TRANSVAAL:
Trade conditions in the.... 630
TURKEY:
Export bounties of.... 593
UNITED KINGDOM:
British vs. American shipping rates: Hindrances to American exports.... 508
Button industry in Birmingham.... 491
Competition with British trade.... 491
URUGUAY:
Export bounties of.... 591
Finances of.... 626
VENEZUELA:
Colonization in.... 598
Concession for making porcelain in.... 627
Export bounties of.... 593
Mechanics' bank in.... 626
Mining taxes in.... 597

Full directions for binding the Consular Reports are given in No. 131, page 663.

VALUES OF FOREIGN COINS AND CURRENCIES.

The following statements show the valuation of foreign coins, as given by the Director of the United States Mint and published by the Secretary of the Treasury, in compliance with the first section of the act of March 3, 1873, viz: "That the value of foreign coins, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the value of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the 1st day of January by the Secretary of the Treasury."

In compliance with the foregoing provisions of law, annual statements were issued by the Treasury Department, beginning with that issued on January 1, 1874, and ending with that issued on January 1, 1890. Since that date, in compliance with the act of October 1, 1890, these valuation statements have been issued quarterly, beginning with the statement issued on January 1, 1891.

These estimates "are to be taken (by customs officers) in computing the value of all foreign merchandise made out in any of said currencies, imported into the United States."

The following statements, running from January 1, 1874, to October 1, 1898, have been prepared to assist in computing the values in American money of the trade, prices, values, wages, etc., of and in foreign countries, as given in consular and other reports. The series of years are given so that computations may be made for each year in the proper money values of such year. In hurried computations, the reductions of foreign currencies into American currency, no matter for how many years, are too often made on the bases of latest valuations. When it is taken into account that the ruble of Russia, for instance, has fluctuated from 77.17 cents in 1874 to 37.4 cents in April, 1897, such computations are wholly misleading. All computations of values, trade, wages, prices, etc., of and in the "fluctuating-currency countries" should be made in the values of their currencies in each year up to and including 1890, and in the quarterly valuations thereafter.

To meet typographical requirements, the quotations for the years 1876, 1877, 1879, 1881, and 1882 are omitted, these years being selected as showing the least fluctuations when compared with years immediately preceding and following.

To save unnecessary repetition, the estimates of valuations are divided into three classes, viz, (A) countries with fixed currencies, (B) countries with fluctuating currencies, and (C) quarterly valuations of fluctuating currencies.

A.—*Countries with fixed currencies.*

The following official (United States Treasury) valuations of foreign coins do not include "rates of exchange."

Countries.	Standard.	Monetary unit.	Value in U.S. gold.	Coins.
Argentine Republic*.	Gold and silver..	Peso.....	$0.96,5	Gold—Argentine ($4.82,4) and ½ Argentine; silver—peso and divisions.
Austria-Hungary†.....	Gold	Crown.....	.20,3	Gold—20 crowns ($4.05,2) and 10 crowns.
Belgium	Gold and silver..	Franc.....	.19,3	Gold—10 and 20 franc pieces; silver—5 francs.
Brazil.....	Gold	Milreis.....	.54,6	Gold—5, 10, and 20 milreis; silver—½, 1, and 2 milreis.
British North America (except Newfoundland).	.....do	Dollar.....	1.00	
British Honduras.....	.....do	.....do	1.00	
Chile.....	.....do	Peso.....	.36,5	Gold—escudo ($1.25), doubloon ($3.65), and condor ($7.30); silver—peso and divisions.
Costa Rica.....	.....do	Colon..	.46,5	Gold—2, 5, 10, and 20 colons; silver—5, 10, 25, and 50 centisimos.
Cuba	Gold and silver..	.....do	.92,6	Gold—doubloon ($5.01,7); silver—peso.
Denmark	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Egypt.....	.....do	Pound (100 piasters).	4.94,3	Gold—10, 20, 50, and 100 piasters; silver—1, 2, 10, and 20 piasters.
Finland.....	.....do	Mark.....	.19,3	Gold—10 and 20 marks ($1.93 and $3.85,9).
France	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Germany	Gold	Mark.....	.23,8	Gold—5, 10, and 20 marks.
Great Britain.....	.....do	Pound sterling...	4.86,6½	Gold—sovereign (pound sterling) and half sovereign.
Greece.....	Gold and silver..	Drachma.....	.19,3	Gold—5, 10, 20, 50, and 100 drachmas; silver—5 drachmas.
Haiti	.....do	Gourde.....	.96,5	Silver—gourde.
Italy.....	.....do	Lira	.19,3	Gold—5, 10, 20, 50, and 100 lire silver—5 lire.
Japan‡.....	Gold.....	Yen.....	.49,8	Gold—1, 2, 5, 10, and 20 yen.
Liberia	.....do	Dollar.....	1.00	
Netherlands§.....	Gold and silver..	Florin	.40,2	Gold—10 florins, silver—½, 1, and 2½ florins.
Newfoundland	Gold	Dollar.....	1.01,4	Gold—$2 ($2.02,7).
Portugal.....	.....do	Milreis.....	1.08	Gold—1, 2, 5, and 10 milreis.
Russia‖.....	.....do	Ruble.....	.51,5	Gold—imperial ($7.718) and ½ imperial ($3.80); silver—¼, ½, and 1 ruble.
Spain.....	Gold and silver..	Peseta.....	.19,3	Gold—25 pesetas; silver—5 pesetas.
Sweden and Norway.	Gold	Crown.....	.26,8	Gold—10 and 20 crowns.
Switzerland	Gold and silver..	Franc.....	.19,3	Gold—5, 10, 20, 50, and 100 francs; silver—5 francs.
Turkey	Gold	Piaster.....	.04,4	Gold—25, 50, 100, 200, and 500 piasters.
Venezuela.....	Gold and silver..	Bolivar.....	.19,3	Gold—5, 10, 20, 50, and 100 bolivars; silver—5 bolivars.

* In 1874 and 1875, the gold standard prevailed in the Argentine Republic.

† On reference to the table of "fluctuating currencies," it will be seen that Austria had the silver standard up to and including the quarter ended July 1, 1892. The next quarter (October 1) inaugurated the gold standard (see note under table of "fluctuating currencies").

‡ For particulars as to the change from silver to the gold standard, see CONSULAR REPORTS No. 201, p. 259.

§ The Netherlands florin, as will be seen in the "fluctuating" table, became fixed in value (40.2 cents) in 1880.

‖ For an account of the adoption of the gold standard, see Review of the World's Commerce, 1896–97, p. 254.

B.—*Countries with fluctuating currencies, 1874–1890.*

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on January 1—					
			1874.	1875.	1878.	1880.	1883.	1884.
Austria-Hungary*.	Silver	Florin	$0.47,6	$0.45,3	$0.45,3	$0.41,3	$0.40,1	$0.39,8
Bolivia	do	Dollar until 1890; boliviano thereafter.	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Central America	do	Peso	.96,5	.91,8	.91,8	.83,6	.....	.....
China	Silver	Haikwan tael	1.61	1.61	.....	.....	.....	.....
Colombia	do	Peso	.96,5	.96,5	.96,5	.83,6	.81,2	.80,6
Ecuador	do	do	.96,5	.91,8	.91,8	.83,6	.81,2	.80,6
Egypt†	Gold	Pound (100 piasters).	.....	.....	4.97,4	4.97,4	4.90	4.90
India	Silver	Rupee	.45,8	.43,6	.43,6	.39,7	.38,6	.38,3
Japan	Gold	Yen	.99,7	.99,7	.99,7	.99,7	.....	.....
	Silver		.....	.....	.....	.....	.87,6	.86,9
Mexico	do	Dollar	1.04,7½	.99,8	.99,8	.90,9	.88,2	.87,5
Netherlands‡	Gold and Silver.	Florin	.40,5	.38,5	.38,5	.40,2	.....	.....
Peru	Silver	Sol	.92,5	.91,8	.91,8	.83,6	.81,2	.80,6
Russia	do	Ruble	.77,17	.73,4	.73,4	.66,9	.65	.64,5
Tripoli	do	Mahbub of 20 piasters.	.87,09	.82,9	.82,9	.74,8	.73,3	.72,7

Countries.	Standard.	Monetary unit.	Value in terms of the United States gold dollar on Janury 1—					
			1885.	1886.	1887.	1888.	1889.	1890.
Austria-Hungary*.	Silver	Florin	$0.39,3	$0.37,1	$0.35,9	$0.34,5	$0.33,6	$0.42
Bolivia	do	Dollar until 1880; boliviano thereafter.	.79,5	.75,1	.72,7	.69,9	.68	.85
Central America	do	Peso	.....	.....	.....	.69,9	.68	.85
Colombia	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Ecuador	do	do	.79,5	.75,1	.72,7	.69,9	.68	.85
Egypt†	Gold	Pound (100 piasters).	4.90	4.90	4.94,3	4.94,3	4.94,3	4.94,3
India	Silver	Rupee	.37,8	.35,7	.34,6	.32,2	.32,3	.40,4
Japan	Gold	Yen	.....	.....	.99,7	.99,7	.99,7	.99,7
	Silver		.85,8	.81	.78,4	.75,3	.73,4	.91,7
Mexico	do	Dollar	.86,4	.81,6	.79	.75,9	.73,9	.92,3
Peru	Silver	Sol	.79,5	.75,1	.72,7	.69,9	.68	.85
Russia	do	Ruble	.63,6	.60,1	.58,2	.55,9	.54,4	.68
Tripoli	do	Mahbub of 20 piasters.	.71,7	.67,7	.65,6	.63	.61,4	.76,7

* The silver standard prevailed in Austria-Hungary up to 1892. The law of August 2 of that year (see CONSULAR REPORTS, No. 147, p. 623) established the gold standard.

† The Egyptian pound became fixed in value at $4.94,3 in 1887.

‡ The Netherlands florin fluctuated up to the year 1880, when it became fixed at 40.2 cents.

C.—*Quarterly valuations of fluctuating currencies.*

Countries.	Monetary unit.	1895.				1896.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.45,5	$0.44,1	$0.48,6	$0.48,6	$0.49,1	$0.49,3	$0.49,7	$0.49
Central America.	Silver peso	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
China	Amoy tael								.79,3
	Canton tael								.79
	Chefoo tael	.70,4	.68,3	.75,1	.75,2	.75,9	.76,3	.76,9	.75,8
	Chinkiang tael								.77,4
	Fuchau tael								.73,3
	Haikwan tael	.74,9	.75,6	.80	.80	.80,8	.81,2	.81,9	.80,6
	Hankau tael								.74,2
	Ningpo tael								.76,2
	Niuchwang tael								.74,3
	Shanghai tael	.67,3	.65,2	.71,8	.71,8	.72,5	.72,9	.73,5	.72,4
	Swatow tael								.73,2
	Takao tael								.79,8
	Tientsin tael	.71,4	.69,2	.76,1	.76,2	.76,9	.77,3	.78	.76,8
Colombia	Silver peso	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
Ecuador	do	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
India	Silver rupee	.21,6	.21	.23,1	.23,1	.23,3	.23,4	.23,6	.23,3
Japan	Silver yen	.49,1	.47,6	.52,4	.52,4	.52,9	.53,2	.53,2	.52,8
Mexico	Silver dollar	.49,5	.47,9	.52,8	.52,8	.53,3	.53,6	.54	.53,2
Persia	Silver kran			.08,9	.09	.09	.09,1	.09,2	.09
Peru	Silver sol	.45,5	.44,1	.48,6	.48,6	.49,1	.49,3	.49,7	.49
Russia	Silver ruble	.36,4	.35,3	.38,9	.38,9	.39,3	.39,5	.39,8	.39,2
Tripoli	Silver mahbub	.41,1	.39,8	.43,8	.43,8	.44,3	.44,5	.44,9	.44,2

Countries.	Monetary unit.	1897.				1898.			
		Jan. 1.	April 1.	July 1.	Oct. 1.	Jan. 1.	April 1.	July 1.	Oct. 1.
Bolivia	Silver boliviano.	$0.47,4	$0.46,8	$0.44,3	$0.41,2	$0.42,4	$0.40,9	$0.41,8	$0.43,6
Central America.	Silver peso	.47,4	.46,5	.44,3	.41,2	.41,4	.40,9	.41,8	.43,6
China	Amoy tael	.76,7	.75,7	.71,7	.66,4	.68,5	.66,2	.67,6	.70,6
	Canton tael	.76,5	.75,5	.71,5	.66,4	.68,3	.66	.67,4	.70,4
	Chefoo tael	.73,3	.72,4	.68,6	.63,7	.65,5	.63,3	.64,6	.67,5
	Chinkiang tael	.74,9	.73,9	.70	.65,1	.66,9	.64,6	.66	.69
	Fuchau tael	.70,9	.70	.66,3	.61,6	.63,4	.61,2	.62,5	.65,3
	Haikwan tael	.78	.77	.73,1	.67,8	.69,7	.67,3	.68,8	.71,8
	Hankau tael	.71,7	.70,8	.67,1	.62,3	.64,1	.61,9	.63,2	.66
	Ningpo tael	.73,7	.72,8	.68,9	.64	.64,3	.63,	.65	.67,9
	Niuchwang tael	.71,9	.71	.67,2	.62,5	.65,9	.62	.63,4	.66,2
	Shanghai tael	.70	.69,1	.65,5	.60,8	.62,6	.60,4	.61,7	.64,5
	Swatow tael	.70,8	.69,9	.66,2	.61,5	.63,3	.61,1	.62,4	.65,2
	Takao tael	.77,2	.76,2	.72,2	.67	.66	.66,6	.68	.71
	Tientsin tael	.74,3	.73,4	.69,5	.64,6	.66,4	.64,1	.65,5	.68,4
Colombia	Silver peso	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9	.41,8	.43,6
Ecuador	do	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9	.41,8	.43,6
India*	Silver rupee	.22,5	.22,2	.21,1	.19,6	.20,1	.19,1	.19,9	.20,7
Japan	Silver yen	.51,1	.50,5						
Mexico	Silver dollar	.51,5	.50,8	.48,2	.44,6	.46	.44,4	.45,4	.47,4
Persia	Silver kran	.08,7	.08,6	.08,2	.07,6	.07,8	.07,5	.07,7	.08
Peru	Silver sol	.47,4	.46,8	.44,3	.41,2	.42,4	.40,9	.41,8	.43,6
Russia	Silver ruble	.37,9	.37,4						

*The value of the rupee to be determined by consular certificate.

FOREIGN WEIGHTS AND MEASURES.

The following table embraces only such weights and measures as are given from time to time in CONSULAR REPORTS and in Commercial Relations:

Foreign weights and measures, with American equivalents.

Denominations.	Where used.	American equivalents.
Almude	Portugal	4.422 gallons.
Ardeb	Egypt	7.6907 bushels.
Are	Metric	0.02471 acre.
Arobe	Paraguay	25 pounds.
Arratel or libra	Portugal	1.011 pounds.
Arroba (dry)	Argentine Republic	25.3175 pounds.
Do	Brazil	32.38 pounds.
Do	Cuba	25.3664 pounds.
Do	Portugal	32.38 pounds.
Do	Spain	25.36 pounds.
Do	Venezuela	25.4024 pounds.
Arroba (liquid)	Cuba, Spain, and Venezuela	4.263 gallons.
Arshine	Russia	28 inches.
Arshine (square)	do	5.44 square feet.
Artel	Morocco	1.12 pounds.
Baril	Argentine Republic and Mexico	20.0787 gallons.
Barrel	Malta (customs)	11.4 gallons.
Do	Spain (raisins)	100 pounds.
Berkovets	Russia	361.12 pounds.
Bongkal	India	832 grains.
Bouw	Sumatra	7,096.5 square meters.
Bu	Japan	0.1 inch.
Butt (wine)	Spain	140 gallons.
Caffiso	Malta	5.4 gallons.
Candy	India (Bombay)	529 pounds.
Do	India (Madras)	500 pounds.
Cantar	Morocco	113 pounds.
Do	Syria (Damascus)	575 pounds.
Do	Turkey	124.7036 pounds.
Cantaro (cantar)	Malta	175 pounds.
Carga	Mexico and Salvador	300 pounds.
Catty	China	1.333⅓ (1⅓) pounds.
Do*	Japan	1.31 pounds.
Do	Java, Siam, and Malacca	1.35 pounds.
Do	Sumatra	2.12 pounds.
Centaro	Central America	4.2631 gallons.
Centner	Bremen and Brunswick	117.5 pounds.
Do	Darmstadt	110.24 pounds.
Do	Denmark and Norway	110.11 pounds.
Do	Nuremberg	112.43 pounds.
Do	Prussia	113.44 pounds.
Do	Sweden	93.7 pounds.
Do	Vienna	123.5 pounds.
Do	Zollverein	110.24 pounds.
Do	Double or metric	220.46 pounds.
Chih	China	14 inches.

*More frequently called "kin." Among merchants in the treaty ports it equals 1.33⅓ pounds avoirdupois.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Coyan	Sarawak	3,098 pounds.
Do	Siam (Koyan)	2,667 pounds.
Cuadra	Argentine Republic	4.2 acres.
Do	Paraguay	78.9 yards.
Do	Paraguay (square)	8.077 square feet.
Do	Uruguay	Nearly 2 acres.
Cubic meter	Metric	35.3 cubic feet.
Cwt. (hundredweight)	British	112 pounds.
Dessiatine	Russia	2.6997 acres.
Do	Spain	1.599 bushels.
Drachme	Greece	Half ounce.
Egyptian weights and measures	(*See* CONSULAR REPORTS No. 144.)	
Fanega (dry)	Central America	1.5745 bushels.
Do	Chile	2.575 bushels.
Do	Cuba	1.599 bushels.
Do	Mexico	1.54728 bushels.
Do	Morocco	Strike fanega, 70 lbs.; full fanega, 118 lbs.
Do	Uruguay (double)	7.776 bushels.
Do	Uruguay (single)	3.888 bushels.
Do	Venezuela	1.599 bushels.
Fanega (liquid)	Spain	16 gallons.
Feddan	Egypt	1.03 acres.
Frail (raisins)	Spain	50 pounds.
Frasco	Argentine Republic	2.5096 quarts.
Do	Mexico	2.5 quarts.
Fuder	Luxemburg	264.17 gallons.
Garnice	Russian Poland	0.88 gallon.
Gram	Metric	15.432 grains.
Hectare	do	2.471 acres.
Hectoliter:		
Dry	do	2.838 bushels.
Liquid	do	26.417 gallons.
Joch	Austria-Hungary	1.422 acres.
Ken	Japan	6 feet.
Kilogram (kilo)	Metric	2.2046 pounds.
Kilometer	do	0.621376 mile.
Klafter	Russia	216 cubic feet.
Koku	Japan	4.9629 bushels.
Korree	Russia	3.5 bushels.
Last	Belgium and Holland	85.134 bushels.
Do	England (dry malt)	82.52 bushels.
Do	Germany	2 metric tons (4,480 pounds).
Do	Prussia	112.29 bushels.
Do	Russian Poland	113⅜ bushels.
Do	Spain (salt)	4,760 pounds.
League (land)	Paraguay	4,633 acres.
Li	China	2,115 feet.
Libra (pound)	Castilian	7,100 grains (troy).
Do	Argentine Republic	1.0127 pounds.
Do	Central America	1.043 pounds.
Do	Chile	1.014 pounds.
Do	Cuba	1.0161 pounds.
Do	Mexico	1.01465 pounds.
Do	Peru	1.0143 pounds.
Do	Portugal	1.011 pounds.
Do	Uruguay	1.0143 pounds.
Do	Venezuela	1.0161 pounds.
Liter	Metric	1.0567 quarts.
Livre (pound)	Greece	1.1 pounds.
Do	Guiana	1.0791 pounds.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Load	England (timber)	Square, 50 cubic feet; unhewn, 40 cubic feet; inch planks, 600 superficial feet.
Manzana	Costa Rica	1⅞ acres.
Do	Nicaragua and Salvador	1.727 acres.
Marc	Bolivia	0.507 pound.
Maund	India	82⅔ pounds.
Meter	Metric	39.37 inches.
Mil	Denmark	4.68 miles.
Do	Denmark (geographical)	4.61 miles.
Milla	Nicaragua and Honduras	1.1493 miles.
Morgen	Prussia	0.63 acre.
Oke	Egypt	2.7225 pounds.
Do	Greece	2.84 pounds.
Do	Hungary	3.0817 pounds.
Do	Turkey	2.85418 pounds.
Do	Hungary and Wallachia	2.5 pints.
Pic	Egypt	21¼ inches.
Picul	Borneo and Celebes	135.64 pounds.
Do	China, Japan, and Sumatra	133⅓ pounds.
Do	Java	135.1 pounds.
Do	Philippine Islands (hemp)	139.45 pounds.
Do	Philippine Islands (sugar)	140 pounds.
Pie	Argentine Republic	0.9478 foot.
Do	Castile	0.91407 foot.
Pik	Turkey	27.9 inches.
Pood	Russia	36.112 pounds.
Pund (pound)	Denmark and Sweden	1.102 pounds.
Quarter	Great Britain	8.252 bushels.
Do	London (coal)	36 bushels.
Quintal	Argentine Republic	101.42 pounds.
Do	Brazil	130.06 pounds.
Do	Castile, Chile, Mexico, and Peru	101.61 pounds.
Do	Greece	123.2 pounds.
Do	Newfoundland (fish)	112 pounds.
Do	Paraguay	100 pounds.
Do	Syria	125 pounds.
Do	Metric	220.46 pounds.
Rottle	Palestine	6 pounds.
Do	Syria	5¾ pounds.
Sagen	Russia	7 feet.
Salm	Malta	490 pounds.
Se	Japan	0.02451 acres.
Seer	India	1 pound 13 ounces.
Shaku	Japan	11.9305 inches.
Sho	do	1.6 quarts.
Standard (St. Petersburg)	Lumber measure	165 cubic feet.
Stone	British	14 pounds.
Suerte	Uruguay	2,700 cuadras (see cuadra).
Sun	Japan	1.193 inches.
Tael	Cochin China	590.75 grains (troy).
Tan	Japan	0.25 acre.
To	do	2 pecks.
Ton	Space measure	40 cubic feet.
Tonde (cereals)	Denmark	3.94783 bushels.
Tondeland	do	1.36 acres.
Tsubo	Japan	6 feet square.
Tsun	China	1.41 inches.
Tunna	Sweden	4.5 bushels.
Tunnland	do	1.22 acres.

Foreign weights and measures, with American equivalents—Continued.

Denominations.	Where used.	American equivalents.
Vara	Argentine Republic	34.1208 inches.
Do	Castile	0.914117 yard.
Do	Central America	32.87 inches.
Do	Chile and Peru	33.367 inches.
Do	Cuba	33.384 inches.
Do	Curaçao	33.375 inches.
Do	Mexico	33 inches.
Do	Paraguay	34 inches.
Do	Venezuela	33.384 inches.
Vedro	Russia	2.707 gallons.
Vergees	Isle of Jersey	71.1 square rods.
Verst	Russia	0.663 mile.
Vlocka	Russian Poland	41.98 acres.

METRIC WEIGHTS AND MEASURES.

Metric weights.

Milligram ($\frac{1}{1000}$ gram) equals 0.0154 grain.
Centigram ($\frac{1}{100}$ gram) equals 0.1543 grain.
Decigram ($\frac{1}{10}$ gram) equals 1.5432 grains.
Gram equals 15.432 grains.
Decagram (10 grams) equals 0.3527 ounce.
Hectogram (100 grams) equals 3.5274 ounces.
Kilogram (1,000 grams) equals 2.2046 pounds.
Myriagram (10,000 grams) equals 22.046 pounds.
Quintal (100,000 grams) equals 220.46 pounds.
Millier or tonnea—ton (1,000,000 grams) equals 2,204.6 pounds.

Metric dry measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.061 cubic inch.
Centiliter ($\frac{1}{100}$ liter) equals 0.6102 cubic inch.
Deciliter ($\frac{1}{10}$ liter) equals 6.1022 cubic inches.
Liter equals 0.908 quart.
Decaliter (10 liters) equals 9.08 quarts.
Hectoliter (100 liters) equals 2.838 bushels.
Kiloliter (1,000 liters) equals 1.308 cubic yards.

Metric liquid measures.

Milliliter ($\frac{1}{1000}$ liter) equals 0.0388 fluid ounce.
Centiliter ($\frac{1}{100}$ liter) equals 0.338 fluid ounce.
Deciliter ($\frac{1}{10}$ liter) equals 0.845 gill.
Liter equals 1.0567 quarts.
Decaliter (10 liters) equals 2.6418 gallons.
Hectoliter (100 liters) equals 26.418 gallons.
Kiloliter (1,000 liters) equals 264.18 gallons.

Metric measures of length.

Millimeter ($\frac{1}{1000}$ meter) equals 0.0394 inch.
Centimeter ($\frac{1}{100}$ meter) equals 0.3937 inch.
Decimeter ($\frac{1}{10}$ meter) equals 3.937 inches.
Meter equals 39.37 inches.

Decameter (10 meters) equals 393.7 inches.
Hectometer (100 meters) equals 328 feet 1 inch.
Kilometer (1,000 meters) equals 0.62137 mile (3,280 feet 10 inches).
Myriameter (10,000 meters) equals 6.2137 miles.

Metric surface measures.

Centare (1 square meter) equals 1,550 square inches.
Are (100 square meters) equals 119.6 square yards.
Hectare (10,000 square meters) equals 2.471 acres.

CONSULAR REPORTS.

COMMERCE, MANUFACTURES, ETC.

Vol. LVIII. DECEMBER, 1898. No. 219.

THE BUTTON INDUSTRY IN EUROPE.

In compliance with the request of a business establishment in Michigan, the Department sent an instruction, dated January 25, 1898, to various consulates in Europe, requesting information in regard to the manufacture of buttons of pearl, horn, vegetable ivory, celluloid, etc., the average production, destination of exports, etc. The answers received are given below.*

AUSTRIA-HUNGARY.

VIENNA.

The pearl-button industry of Austria-Hungary, which in former years occupied a prominent place among the flourishing industries of the Monarchy, has dwindled of late to such an insignificant figure that pearl buttons can no longer be regarded as one of the principal articles of export to the United States. To the development of the pearl-button trade in the United States, may be attributed the decline in Austria of this once thriving business. Under a comparatively low tariff, the trade in Austria prospered, in the year 1895 $315,543.27 worth being exported (which exceeded by $100,000 the export value of foregoing years); but last year there was a total collapse of the business. The same buttons are now being manufactured in the United States at prices that practically exclude the possibility of active competition. American manufacturers who have ventured to compete with foreign producers have the advantage

* Advance Sheets of the report have been sent to the firm desiring the information.

of being near to large shell beds, and this fact, coupled with improved machinery and methods, enables them to keep up a lively opposition to continental goods.

In former years, the manufacture of pearl goods in this city was carried on in what were then large factories, employing from 50 to 200 workmen each. The business was a profitable one to both employer and employee, for the work was very simple; and a skilled artisan could easily earn from 14 to 20 florins ($5.68 to $8.12) per week, which in this country is looked upon as a very fair wage. In Bohemia, where a smaller but nevertheless comparatively large quantity of buttons was turned out, this was a house industry; that is, the work was performed in the homes of the workingmen, who obtained material from their employers, carried it home, and all the members of the family worked on it. By means of these industries, each person contributes his or her share to the family support. Even children are employed in sewing buttons on cardboard and in sorting. In this special industry, the only machinery necessary is a turning lathe, which can be worked either by steam or foot.

The principal shells used in making high-grade one-piece collar buttons are the Red Sea and Mediterranean shells, brought into the country by way of Trieste. These shells range in price from 25 to 30 cents per pound, and the buttons into which they are manufactured are of the best quality, made by hand, and may even now be profitably exported in small quantities to the United States. A still better grade of shells is imported from Australia by way of London, costing on an average from 40 to 50 cents per pound. These goods, however, are too expensive for ordinary high-grade collar buttons, and are therefore made into the most expensive buttons, knife handles, opera glasses, umbrella handles, etc. Then there are black shells, natural black and gray, which come from Tahiti and the Fiji Islands by way of San Francisco and London and bring prices ranging in the vicinity of 18 to 20 cents a pound. Besides these varieties, there exists an inferior low-priced shell imported from Persia at 1½ to 2 cents a pound. Bohemia consumes mostly Panama shells, a common class of goods from which cheap buttons for underwear use are made. Panama shells vary between 12 and 15 cents per pound. At the present moment, prices for all grades of shells for buttons are rapidly advancing, on account of the increased demand.

A bed of shells requires, ordinarily, fifteen years to mature or grow, and if worked too much before this length of time has elapsed it is worn out. An instance of this exhaustion is found in the case of the beautiful Egyptian shells. The supply of Egyptian shells was formerly regular, but the goods were so much sought after that the beds were unable to yield enough to fill the market, and were over-

worked in consequence. The shells can now be procured only in limited quantities and at an extraordinarily high figure.

American button manufacturers have been successful in the production of cheap pearl goods for underwear and other purposes. Their success in this line is due to improved machinery and methods, which enable the work to be done so much more quickly that they can afford to use the best shells and bear the waste attendant upon machinery and quick work. As stated before, fine one-piece collar buttons can not as yet be produced in the United States as cheaply as in Austria, in view of the fact that no contrivance has been invented that will accomplish the work as neatly and symmetrically as the Austrian workman can do by hand. This, however, will no doubt follow with the growth of the industry at home.

In this country, the outlook is poor at the present writing. Most of the factories have shut down. An export trade to eastern countries exists, but the profits therefrom do not equal those formerly made in the American market. There is no doubt among button manufacturers here but that the next few months will witness a total cessation of exports in this branch to America.

CARL BAILEY HURST,
VIENNA, *April 29, 1898.* *Consul-General.*

REICHENBERG.

Of the various kinds of buttons named in the instruction from the Department of State, only those of horn are made in this consular district.

The industry is carried on exclusively in factories—not at all in houses. These buttons are made of hoofs of oxen. First, the hoofs are boiled in large kettles, then go into a machine which cuts them into fragments. Another machine takes these fragments and shapes buttons from them. The crude buttons then go under a hydraulic press, which stamps various desired patterns. Another machine bores holes in the buttons, and still another polishes them.

An average factory will produce from 1,500 to 2,000 gross of horn buttons a week, a smaller number of large-sized buttons, and a larger number of small-sized ones.

Seven sizes of horn buttons are made, which cost and sell as follows, per gross, in United States currency: Cost price, 16, 18, 21, 25, 31, 43, and 64 cents; selling price, 18, 20, 24, 29, 36, 50, and 70 cents.

The entire product is at present consumed at home. The manufacturers inform me that the United States tariff law makes it impossible for them to export to that country, and that they have no other foreign market.

FRANK W. MAHIN,
REICHENBERG, *June 14, 1898.* *Consul.*

FRANCE.

PARIS.

In reply to Department instruction in reference to the manufacture of pearl, horn, vegetable ivory, celluloid, and rubber buttons in my district, I beg to state that I have made many but ineffectual attempts to obtain information. For some reason, the most prominent manufacturers decline politely but most positively to divulge their processes. I have had a number of letters and interviews; but the answers to all my questions are most vague, and I have been unable to obtain what I would call an intelligent reply from any of the manufacturers.

Many of them confine their manufacture to one particular line of goods, and, while not divulging any of their own processes, state they would be pleased to inform me of the others if they had any particular knowledge of the same. For instance, one of the largest manufacturers says: "We can only speak of our specialty, which is agate buttons, and are not in a position to give you any information as to the manufacture of other buttons." He states that he manufactures in his own works and employs a large number of machines. A great deal of hand labor, such as fastening the buttons on cards, is done outside of the works, by workmen or women in their individual homes. He states that the principal machines which he has are those which mechanically press the paste into the form of button desired, after which the oven completes the preparation. The works have many thousands of dozens of varieties and sizes, shapes, and colors; but, says the writer, the tariff of 1897 has injured the trade with the United States. He adds:

> Take, for instance, the agate buttons, which have the largest sale in the United States. The duty on the white "lentille," which is 17 lines in diameter and sells for 1.05 francs (20 cents) the 12 gross, represents about 115 per cent of the net value, less discount. As regards the second quality of the same class of buttons, which sells for 90 centimes (17.03 cents), the duty represents very nearly 145 per cent of the net value.

It is evident that the manufacturers will not give any information as to their different processes which might enable an American house to manufacture at home, and thus deprive them of such trade as they may heretofore have had.

JOHN K. GOWDY,
Consul-General.

PARIS, *August 10, 1898*

GERMANY.

BERLIN.

The button industry in Berlin is not confined simply to the manufacture of buttons, but includes buckles, clasps, dress ornaments, and trimmings. The industry, which in former years paid good profits, has become from year to year less remunerative, and at present there are only four factories here.

The causes for this condition are varied. The growth of the metropolis has increased the cost of living, so that this industry, which had originally moved into the city from country villages, is finding its way back again to where the skillful workers, trained for generations in this industry, can afford to work for lower wages than in the city. But even in the country villages, the industry is reported as nearly profitless, owing to the changing fashions and to some extent also to the uncertainty of the American tariff, so that the factories as a rule follow a kind of "hand to mouth" policy and avoid carrying stocks as much as possible.

The industry in Berlin—what there is of it—is carried on in the factories. While the owners of these are otherwise obliging in supplying information, they refuse to give any clue as to interior work, machinery, average production, or place of destination, except on such goods as they feel sure can not be imitated in America, as, for instance, the finer jet goods, in which the jet is riveted to steel plates.

Before the enactment of the McKinley tariff, there were shipments of buttons and trimming of the kind above mentioned to the United States, though England and her colonies were by far the best buyers of German goods, and are so even now. The Dingley tariff is prohibitive, except on goods which can not be made in America, owing to the lack of long-skilled labor—so the manufacturers here assert.

By examining the list of consignments from Berlin to the United States for 1896 and 1897, I find shipments of buttons as follows:

Year.	First quarter.	Second quarter.	Third quarter.	Fourth quarter.
1896	$11,424	$4,340	$2,464	None.
1897	1,009	None.	None.	None.

The first quarter of 1898 shows, thus far, $2,142.

In German official statistics, buttons, whether pearl, glass, horn,

vegetable ivory, celluloid, rubber, or jet, as well as ornaments and trimmings made of these articles, are not separately reported, so that it is not possible to give correct statements of exports of these goods. The manufacturers are no more satisfactory in their statements than the statistics. They do not wish to grant an insight into what they consider their business secrets.

A close scrutiny of German export statistics, as far as they give a clue, shows that the largest percentage of the export of this class of goods goes to England, doubtless for subsequent distribution all over the globe.

I regret that this report does not answer more fully the questions asked, and I send it more as a description of conditions here, hoping that in connection with some reports which will doubtless be received from smaller towns, a fuller picture or idea of this business and industry may be obtained.

JULIUS GOLDSCHMIDT,
Consul-General.

BERLIN, *March 31, 1898.*

BARMEN.

I learn from a former most prominent manufacturer of buttons that the button industry in this district has been for the last ten years almost at a standstill. There are now only two or three firms manufacturing a very limited quantity of vegetable-ivory, horn, and metal buttons (pearl buttons never were manufactured in this district), the trade being local and with England, and very little going to the United States.

It is claimed that the industry will remain dead until the fashion calls for the wearing of buttons in the same way as years ago, and that in this case the increased tariff of the United States will not affect the exports to that country.

MAX BOUCHSEIN,
Consul.

BARMEN, *February 11, 1898.*

FREIBURG.

After a careful investigation, by personal interviews and by correspondence with the various chambers of commerce of the cities of my district, I am obliged to state that the manufacture of pearl, horn, vegetable-ivory, celluloid, and rubber buttons here is very limited. There are no buttons of any description made in Alsace-

Lorraine, and in Baden there are but two small button factories, one at the capital, Karlsruhe (not in my consular district), and the other at Freiburg; the one here is the larger and employs about 400 persons.

I applied in person at the office of this factory, was received very courteously, and shown through the factory. Besides buttons, a great quantity of beads is manufactured for the African and Indian trade. The buttons and beads are of agate or porcelain nature, for different styles of shirt and collar buttons. The kaolin or earth is ground or prepared at another establishment a few miles away; it is pressed into the desired shape by suitable machinery (some of which is of American make), deposited on iron frames about a foot square, then placed in the furnace, where, after a certain time, the buttons are hard, firm, and finished.

The work of sewing the buttons on the cards (1 gross on each) is chiefly a house industry, the average pay being less than 1 pfennig (one-quarter of a cent) per card. It is done mostly in the winter time by the inhabitants of neighboring villages, and scarcely at all in summer when the fields are being cultivated.

The machinery employed includes many complicated machines for various kinds of buttons, and some automatic apparatus for stringing the beads. It is claimed that these agate buttons are not made in America and can not be made there, because of the cost of labor, and also that no machine could be made to sew the buttons to the cards, because the buttons coming from the furnace are not always mathematically exact and similar, as they ought to be for an automatic machine. Here is a chance for American ingenuity to invent a machine which will do such work. The machines are operated by both men and women, and, as in America, the pay of the man is greater for the same kind of work, averaging 2 to 3½ marks (47 to 83 cents) per day of twelve hours. Women receive from 1 to 1¼ marks (24 to 29 cents) per day. The best paid laborers are the expert furnace operators, who get from 5 to 6 marks ($1.19 to $1.42) per day.

The production of each variety depends upon the demand, and, as this varies greatly, the average can not be stated. The selling price is greater in Germany than in other countries, because of the home tariff of 14 marks per 100 kilograms ($3.33 per 220.46 pounds). There is but a small demand for these buttons in Germany, but a good market exists in South Africa, India, Russia, Asia Minor, Siam, Cuba, Mexico, and South America. It might be said that the African and Indian trade supports the business here, and that the United States markets are unremunerative. The United States tariff has cut off the trade. My books show that during the past few years

the declared values of the buttons sent from my district to the United States has been as follows:

Quarter ending—	Value.	Quarter ending—	Value.
September, 1895	$18,504.35	March, 1897	$11,688.75
December, 1895	15,741.05	June, 1897	8,754.05
March, 1896	14,482.85	September, 1897	1,062.85
June, 1896	6,322.35	December, 1897	6,003.30
September, 1896	5,526.75	March, 1898	6,499.10
December, 1896	6,755.05		

E. THEOPHILUS LIEFELD,

FREIBURG, *March 31, 1898.* *Consul.*

GERA.

I can report on only the vegetable-ivory button industry, as neither celluloid nor rubber buttons are made in my district, and the manufacture of pearl and horn buttons is so small as not to deserve mention.

With regard to vegetable-ivory buttons, I have done my best to obtain the desired information; but I am compelled to remark that my endeavors were attended with great difficulties, the manufacturers refusing to divulge what they call their business secrets. In view of these obstacles, many details were obtained from outside parties and by circuitous routes.

Though Schmoelln is a town of but 9,000 inhabitants, it takes the lead in the manufacture of ivory buttons and enjoys a world-wide reputation in this line. Not less than fifteen factories and about 2,000 male and female laborers are employed in this industry. All the work is done in the factories, with the exception of sorting and sewing the buttons on cards, which forms an occupation for poor people at home.

Fashion has been unfavorable to the article for the last five years, these buttons being but little used for ladies' dresses. There was at one time a temporary demand for large buttons for ladies' jackets and cloaks, but the production was in the main limited to gentlemen's buttons, which, taken with increased competition and many mechanical improvements, caused a continual overproduction. Under these circumstances, the trade was characterized by a downward tendency and a reduction of profit. The vigorous competition of Bohemia, with cheaper labor, also seriously affected the sale of German buttons in foreign countries. With these adverse conditions, it is not surprising that a number of factories in this as well as in other European countries were forced to suspend operations. Of late, the trade has experienced a partial revival, the article being used in considerable quantities for gloves.

The total annual production of ivory buttons in Schmoelln is estimated at 2,500,000 gross, of which about two-thirds are exported to all quarters of the globe. The leading firms employed in the manufacture are H. Donath, V. Donath, Leuboldt & Co., Kühn & Co., Gebr Donath, Julius Donath, and E. Schimmel & Co.

Rapid progress has been made in original designs in these goods, and great attention is paid to the style and color of garments.

As to the varieties of the article, it would not be within the space of this report to give a detailed description. All grades, from the plainest and cheapest to the finest and most expensive novelties showing floral and ornamental designs in various colors, are produced in Schmoelln.

In Germany, the lower qualities are receiving the greatest attention, while the higher grades have the preference in England, Russia, and the United States. The business in the United States is mostly done on commission, in other foreign countries by agencies, and in Germany either directly or through travelers, and on terms varying from cash with a discount of 2 per cent to a practical credit of six months

As to the effects of our new tariff, all exporters assert that the staple article is suffering, while superior qualities still find a ready sale in the United States.

The selling prices of the buttons vary from 12½ to 95 cents per gross, and it is stated that the cost of production is from 10 to 15 per cent lower than the first-given price.

The raw material or ivory nut, the fruit of a species of a South American palm, is mainly procured through Hamburg importers. According to quality, its price varies from 16 to 24 marks ($3.81 to $5.71) per 100 kilograms (220.46 pounds), and it is bought on three months' time against acceptance. Formerly, the raw material could be purchased at a much lower price; but the great demand, which has grown with the extension of the industry, has caused the value to rise considerably.

Before being manufactured into buttons, the nuts are shelled by means of a rotating sheet-iron drum, provided on the interior with sharp three-edged irons.

There are two methods of cutting the nuts. According to one, the kernel is cut into halves, out of which the raw buttons are bored by machines. This is termed the Saxon method, and is preferred in the manufacture of small buttons. A so-called Berlin method consists in the cutting of the kernel into small blocks, which are formed into buttons by means of a shaping machine. This is especially used in the production of large buttons.

The process of dyeing requires great skill on the part of the workmen, who are carefully trained for the purpose and must possess some

chemical knowledge. Almost every factory has special combinations of colors which are kept carefully secret. To dry the buttons, they are placed on wire hurdles and slowly subjected to a certain degree of heat.

The process of polishing is effected by means of a large revolving, felt-lined barrel, and by the application of polishing stones, etc. Fine buttons receive an additional polish by hand. For boring holes and paring, there are specially constructed machines, working with the greatest accuracy and speed.

Many machines used in the manufacture of ivory buttons are supplied by the machine works of Paul Sylbe, Schmoelln, and A. Kolbe & Co., Gössnitz (Saxe-Altenburg), who are willing to furnish manufacturers with catalogues and price lists.

The rate of wages is in contrast with the earnings of our factory hands. While the standard of wages remains almost stationary, provisions are constantly rising in price. Hence the laboring classes are restricted to the barest necessaries of life.

The following shows the weekly wages now paid in Schmoelln in the ivory-button industry:

Workmen.	Per gross.	Per week.
	Cents.	
Borers	1½ to 2¼	$3.57 to $4.76
Cutters	1¼ to 1⅞	2.86 to 3.56
Punchers	0¾ to 0⅞	1.43 to 2.14
Parers	0¾ to 1¼	3.81 to 4.52
Hand polishers	2 to 2½	2.38 to 3.57
Sorters and sewers	1	0.71 to 0.95
Dyers	.....	4.76 to 5.72
Polishers	.....	2.86 to 3.33

The hours of labor are from 7 o'clock in the morning till 7 o'clock in the evening in winter, and from 6 o'clock in the morning till 6 o'clock in the evening in summer, excepting thirty minutes for breakfast, one hour for dinner, and thirty minutes for vespers.

I give also a statement of the retail prices of some of the necessaries of life in Schmoelln.

Articles.	Price.	Articles.	Price.
	Cents.		*Cents.*
Rye bread.....per pound...	3	Rice.....per pound...	7 to 10
Wheat flour.....do.....	4¼	Butter .....do.....	30 to 32½
Pork.....do.....	20	Sugar.....do.....	7 to 8½
Beef .....do.....	16	Coffee, ordinary .....do.....	35
Veal.....do	16	Eggs ....per dozen...	16½
Mutton .....do.....	16	Milk.....per liter (1.0567 quarts)...	5
Bacon.. .....do.....	22½	Beer .....do.....	4½ to 7½
Hams.....do.....	40	Petroleum .....do.....	4½
Potatoes.....do.....	1		

In this connection, it may be of interest to know that the lodgings of the factory hands in Schmoelln consist mostly of two to three comfortless rooms, for which, according to locality, a rent of from 105 to 135 marks ($24.99 to $32.13) has to be paid per annum.

CHARLES NEUER,
GERA, *March 12, 1898.* *Consular Agent.*

UNITED KINGDOM

BIRMINGHAM.

The industry is carried on in factories, and manufacturers have always declined to admit visitors, or to give particulars of the kinds of machinery employed by them and of the cost and selling price of their product, other than such details as are supplied by their invoice declarations. Nor would it be possible for a consul to ascertain the proportion of the product of the Birmingham district which is consumed at home and the proportion exported to other countries. An interior district can not be separated from the country of which it forms a part; so that it would be absolutely impossible to give detailed exports of buttons from it except to the United States, as there is no commercial body here which takes cognizance of such matters. The destination of buttons from the whole Kingdom may, of course, be found from the Board of Trade returns, but as these are easily accessible to home manufacturers, I assume that I am not expected to go outside the limits of my district.

GEORGE F. PARKER,
BIRMINGHAM, *February 12, 1898.* *Consul.*

COMPETITION WITH BRITISH TRADE.

Mr. Henry White, secretary of the embassy at London, sends to the Department, under date of October 14, 1898, copies of a Blue Book recently issued by the British Board of Trade on the subject of foreign-trade competition, embodying reports from diplomatic and consular officers of Great Britain. Mr. White also transmits extracts from newspapers bearing on the subject, which, together with portions of the reports that are thought to be of interest to United States trade, are given below:

[From the Times, London, October 14, 1898.]

The memorandum compiled by the Board of Trade on the ways and methods of British trade, of which we have already given a summary, is not pleasant reading; and the moral which the memorandum teaches is not the less grave that it is an old one, often enforced in these columns. No fewer than one hundred and sixteen

diplomatic and consular officers make reports from all parts of the world; and with scarcely an exception, the reports lament and condemn the shortcomings and supineness of the British trader. He is being ousted in countries in which he once had no rivals; he is gaining access to few new markets; and he suffers in the struggle for existence not because other nations are becoming as enterprising as he, but because they are advancing while he is stationary or is falling behind. He will not see that everywhere trade is changing. And so he will not supply cheap articles, but allows the demand for them to be satisfied by Germany or America.

"The Briton does not care to sell unless he gets large orders, whereas the others book and execute small orders." The same want of pliability and adaptiveness appears in the refusal to study customers' wants, probably the most serious obstacle to the spread of British trade.

Akin to this failing is the disinclination to grant credit facilities to customers so freely as is done by German houses. Where English houses give only two or three months' credit, or insist upon payment on delivery, German firms give at least six months' credit, so as to allow time for the sale of the consignment before payment. Our rivals do not sell for the mere sake of selling; and, if they do not with this system make many bad debts, it is that they have better means of information as to the character of their customers. Even our colonies are visited by few English commercial travelers, and those who are sent out to foreign parts are rarely well equipped for their work. They do not always know the language of the country, and they have not sufficiently studied its requirements. It seems incredible that English men of business should conduct their affairs in the fatuous manner thus described.

In the opinion of the consuls, there is too much reliance upon "flooding the consulates with elaborately and artistically got-up catalogues, price lists, etc., containing a request that they should be distributed or placed at the disposal of dealers"—a "system" pronounced "absolutely valueless."

"One commercial traveler, knowing the language and the ways of the people, will do more than ten thousand circulars," says our consul at Cherbourg; and this is the purport of all the reports. The American exporters to Russia send out, we are told, enormous quantities of illustrated price lists; but they take care to give the prices reduced to Russian rubles, duty paid, with exact information as to weights, all printed in the Russian language. The English catalogues, on the other hand, give price lists in the English language and in English currency. "As generally no weights are given, the would-be purchaser can not even guess what the duty would come to, and, considering that, roughly speaking, the duty varies from 40 to 90 per cent of the cost price, according to the weight and the different classes of metal employed, such price lists are useless to Russian buyers." When an English firm sends out an agent to look after its interests or to open new markets, the probability is that, if he is not a German, he is ignorant of the language of the country. "It is pitiable," writes our consul at Naples, "to see the British commercial traveler stumbling along with an interpreter, while his German competitor is conversing fluently; and one is still more sorry for him when his patterns and samples are marked with British weights and measures." Moreover, our merchants do not pack their goods as their customers desire. Perhaps they know what is best as to this and all other practical details; but it is curious that they should not fall in with the wishes of the latter as to a point on which the German exporters show themselves accommodating.

It would also appear to be the fact that in some markets the British manufacturer is placed at a disadvantage by reason of high freights. The frequency of strikes, too, is a serious element. A prudent manufacturer or producer in some branches of trade inserts a strike clause in his contracts. The contractor is often

obliged to ask an extension of time; and this naturally turns the thoughts of customers to countries where business is less disturbed. The report mentions many instances in which orders intended for England have gone elsewhere in consequence of the engineers' strike.

[From the Standard, London, October 14, 1898.]

One of the most frequently recurring complaints in this Parliamentary paper is that our manufactures are too good, and, consequently, too highly priced, to suit foreign consumers whose first and last ideal is cheapness. Many of them, like the Russian purchasers of agricultural implements, would rather have a cheap and inferior article than one costing half as much again and lasting twice as long. They are anxious to be modern and "up-to-date;" and, if they can not set a fashion, at least want to be on equal terms with those who do, and to demonstrate their prosperity to their neighbors by exhibiting reaping, tilling, and thrashing machinery of approved and complicated design. Naturally enough, they are anxious to buy their glory as cheaply as possible; and if the English implement maker will not help them to do so, they will, of course, turn to his competitor, who, producing a lighter, less carefully finished, and altogether less dependable article, can afford not only to sell it at an appreciably lower price, but to grant facilities for payment which the English maker is unable or reluctant to concede. With the single exception of the United States, all countries are poorer than England, and our traders are no doubt at times in danger of forgetting that some of the lands with which they do export business are really poverty stricken. From centers so widely sundered as Rome and Archangel, Veracruz and Zanzibar, comes the same story. Buyers admit that our goods are the best that can be made. They admire; but they take their custom elsewhere. Nor does it follow that the foreign producer who sends into the market an article which an English purchaser, accustomed to solid durability, would not look at, loses by the moderate returns he receives. Profits depend as much upon turnover as upon prices; and in modern commerce more is to be made by doing a large business at low prices than a small one at high rates.

Stress is laid by the consuls upon the disinclination of the English trader to meet the wishes of the foreign buyer in matters of detail. As often as not, he refuses to take the trouble to quote a fixed inclusive figure for his goods delivered at his customer's door or at the nearest port, contenting himself with the price at the factory, expressed in English money. Our consul at Naples puts the matter compendiously when he says: "It seems absurd that the first commercial nation in the world should measure their horses by hands and their dogs by inches, their cloth by ells and their calico by yards; that such impossible numbers should come into their square measure as 30¼ and 4,840, and in their measure of solidity as 1,728. And the weights are worse still." But this is not the only direction in which we prefer our own way to that of our customers. We insist upon shaping, coloring, and packing our goods to please ourselves, and not to please the consumer. Moscow asks for its lace in pieces of a given length. British lace machines make it only in strips nearly four times as long; and so French, German, and Swiss makers, who provide what is wanted, take the trade. South Germany needs leather dyed a particular shade. The English firm whose goods are admittedly the best in the market refuses to supply it, but an obliging French house comes upon the scene and secures the order. Foreign traders, again, make no difficulty about giving double the credit allowed by English manufacturers; while freights from Great Britain are often almost prohibitive. Iron, for instance, is conveyed from the Eastern States of America to the Pacific coast, and thence by steamers to Japan, at 25s. a ton for the whole journey, whereas the railway freight alone from Glasgow to

London would be 20s. a ton. If to all these points we add the still more familiar ones of the scarcity of British commercial travelers abroad, the development of technical education on the Continent, and the uncertainty in the delivery of orders caused by the frequency of strikes in this country, we have a very serious indictment of British commercial methods.

At the same time, our merchants, perhaps, are not altogether to blame, and the severity of the censure passed upon them may not be wholly justified. For one thing, our traders are not well served by the Foreign Office. It is notorious that a German, or in less degree perhaps a French, consulate, is virtually a German or French chamber of commerce in partibus. The consular officers are quite as much commercial agents as government officials, and omit no effort to push the trading interests of their countrymen. Until very recently, our own Foreign Office has disdained to trouble itself actively about anything so undignified as trade. Like master like man; and the consuls, who, in most respects, are admittedly admirable and devoted public servants, are only now awakening to the importance of their opportunities as aids to British trade.

Extracts from Diplomatic and Consular Reports.

RUSSIA.

St. Petersburg.—The most formidable rival of Great Britain in the Russian market is undoubtedly Germany. To compete successfully with her, the employment of numerous active commercial agents and travelers is the first condition, and in this respect we should follow the example of our German rivals, who, by the numerous and dexterous agents employed by them, bring their goods to the immediate notice of both wholesale and retail dealers, with results very satisfactory to themselves. Russia would seem to afford a good field for pushing the sale of British-made agricultural machinery and implements, hardware of every kind, earthenware, and glass of the cheaper kind, as also tools and machinery of all descriptions. Printed catalogues and circulars should be drawn up in the language of the country, with metric weights and measurements, which are generally understood here by importers.

It is more supineness than anything else on our part to allow Germany to supply Russia—as she did, for instance, in 1895—with 64 per cent of all metals imported, 53 per cent of all manufactures in metal, and 49 per cent of all the machinery. The absence of the British commercial traveler is mainly at the root of this, and that he is not more abroad and active must be deplored. To be beaten at our own special weapons, by craftsmen who are more or less our own commercial pupils, is manifestly an abnormal condition of things, which British enterprise could without much effort remove.

* * * * * * *

Owing to the recent engineers' strike in Great Britain, a great many orders for railway locomotives, electric plant, and other machinery went to Germany and the United States; in this way great injury was done to British industrial interests in this country and the success of our rivals furthered. As a case in point, the Finnish Railway Company, which had always previously supplied itself with locomotives of British make, gave an order for twenty powerful locomotives to American builders, seeing that it could not rely on the execution of the order within a reasonable time in England in consequence of the strike.

Odessa.—That English firms meet with comparatively little success is not surprising, when we come to reflect upon their system of conducting business. The root of the evil, in the majority of cases, lies in the careless selection of agents. Business is intrusted to so-called agents, many of them foreign Jews, who, having

absolutely nothing to lose, sell goods to anybody from whom they can obtain a bill, simply for the sake of their commission. Such bills fall due and are not paid, the result being that Russia gets a bad name; and the British manufacturer eventually closes his business relations with this country a heavy loser, and often the dupe of his own agent.

The at present defective system of distributing catalogues, to which the British manufacturer is so partial, might possibly be in a measure rectified, so as to fulfill its avowed purpose. It might, for instance, be suggested that a dozen or two large manufacturers should collectively arrange a permanent showroom for their samples and catalogues, say at Odessa, and that these samples and catalogues should be sent from time to time to the many exhibitions held in various towns throughout the Empire. These exhibitions, which are well attended, would appear to offer, under proper representation, excellent and economical opportunities for bringing British goods before the notice of the Russian public.

* * * * * * *

In portable engines and thrashers, German competition has made itself felt. The success realized by German machines over English is due to the long terms of credit given by German firms, in some instances amounting to three or four years, and the small amount of hand money taken; cases are known where the sum received actually failed to cover duty and freight.

Business could be done by English firms in manual-delivery reapers, if in point of weight these machines could be adapted to the requirements of Russian agriculture. An energetic representative here of a well-known English firm sent a machine of Russian make home as a pattern to copy, but his firm came to the conclusion that the market was closed to them by customs protection. An American firm is now successfully introducing these machines into Russia. Their success is due to the malleable steel exclusively used by them in casting harvesting machinery.

Riga.—German firms who manufacture machinery, carpentering, gardening, and other kinds of tools and appliances, exert themselves to become thoroughly acquainted with the Russian customs tariff, in which nearly everything goes by weight. Finding, for instance, that the presence of certain metals, such as brass, would cause an article to fall under a dearer tariff in this country, they substitute, wherever possible, something less suitable, perhaps, and less durable, but still practicable, and in this way they are enabled to supply the said article delivered, duty paid, in Russia at a figure with which the British manufacturer can not enter into competition, for the simple reason that his article would come under a higher duty. When brasses can not be dispensed with entirely, the German makes a separate parcel of them, and the higher duty is only levied on their own individual weight, and not on the whole machine or implement.

Nicolaiev.—A step that I should suggest is to reduce the number of hands through which the goods pass from the manufacturer to the consumer. At present, the British producer usually employs a commission agent at home, who, in turn, corresponds with others abroad. The result is that before a commodity reaches its destination it rises considerably in price, and is therefore less able to compete successfully with the foreign article. On the other hand, the appointment of sole agents for such an enormous country as Russia is also unadvisable.

The largest business in this country is carried on by those who grant the most credit. It is, therefore, all the more important to appoint agents whose integrity is well known, and, where agents do not exist, for commercial travelers to ascertain the character of the persons with whom they propose to deal. The usual credit given is from three to six months against bills of exchange; but when business is slack, as much as nine months, and sometimes more, is granted.

Taganrog.—Frenchmen, Germans, and Belgians contrive to obtain concessions and engage in profitable commerce and industry in this part of the world, in spite of heavy duties and other hindrances to trade. Our own manufacturers and merchants might do well to send a few commercial travelers, acquainted with the language, to make a tour through the Crimea and Transcaucasia and meet local buyers. If business is to be done in this region, it can not be secured by any other means. Machinery for mills and artesian wells, agricultural implements, steam launches and tugs, rope, fishing seines, nets and hooks, and tin plates may be mentioned as articles for which a demand might be expected. In this district, the field for enterprise is small, yet something could be done.

NETHERLANDS.

Amsterdam.—In railway material, with the exception of locomotives, the larger number of which are British, Germany has naturally almost a monopoly.

The excellent system of classification of such goods which now prevails throughout all Germany, in consequence of the thorough organization of the iron and steel trades, tells very strongly against Great Britain, where no such classification exists to the same extent. It is evident that the consumer, who needs only to order an article by its normal classification, finds his task much more easy than one who orders goods from Great Britain in special unclassified measurements, and is even inclined to pay a somewhat higher price where so much trouble is saved, and it is also clear that the classification of such goods renders it possible for the German manufacturer to work more cheaply than his British competitor.

GERMANY.

Frankfort.—English furniture, English wall paper, English household goods, and objects of art are enjoying a continually increasing favor, and would find a still better market if the British manufacturer would devote as much attention to pushing sales as the Germans are accustomed to do, by establishing agencies or branch offices, etc., with managers familiar with the foreign country and its language. If this method is not adopted, England will allow a very good opportunity to pass by unused, the more so as the United States is showing of late increased activity and attention to the German markets.

Berlin.—I have heard on good authority that the English tin-plate trade with Germany would be much greater if the import were not beset with so many difficulties. For example, if the English manufacturers would send their goods, franco, duty free to Hamburg, or to any other German port; and if the English works could produce the so-called "German form," these things, it is said, would have the effect of increasing the import trade from England.

Stettin.—Much has been said and written in Great Britain on the superiority of the German technical education to that of Great Britain. Thus, in Great Britain there are numerous public and private schools having a modern side in their curriculum, which is an excellent adaptation of what is termed in Germany the "Real Gymnasium," but in how many English schools is this modern side looked down upon by the head or high master, and consequently by the boys themselves, and the classic side held up as the education which befits a gentleman. Again, how many British boys on leaving school or the universities to face life in a business which is world-wide can speak with fluency or even tolerably any language other than their own. They have, it is true, a certain knowledge of Latin, which is very useful, and a smattering of Greek, which is useful probably for the church or in the learned professions alone; but could they proceed to France or Germany or Spain and be able to make themselves understood? Undoubtedly, the far greater majority of British lads on the completion of their education become what is vaguely termed

men of business, and at the present day it is an absolute necessity for the carrying on of that business against the keen competition—which, owing to European peace, has manifested itself in foreign lands during the last twenty-five years—that we, as "a nation of merchants," should be able to deal with our customers in their own tongues, and for this purpose it is of the utmost importance that the youth of Great Britain should be instructed for the most part in living languages. Will the day ever come when educational establishments in Great Britain will be able to exchange pupils with equally respectable establishments on the Continent, for it is admitted on all hands that a language can only be learned to perfection in its own country; and in time of youth, as much can be learned in one year as can be attained in three at a maturer age.

Munich.—The internal packing, especially with regard to the advantageous display of the goods themselves, was, some ten years ago, often complained of in German consular reports; but this has now been greatly improved, and Germans actually far surpass the French in the tasteful and suitable manner in which they present their wares to foreign buyers. The linen trade has elegant cardboard boxes with colored printing, ornamental bands, and labels printed in gold. Note paper is packed in beautiful cardboard boxes and cases. Jewelry and plate are in leather cases, lined with silk or satin, while the bonbonnieres and bottles for sweets and scent are works of art, the bottles themselves being placed in prettily lined and padded boxes. Special industries of their own have been created which undertake the manufacture of elegant packages; in fact, the decorative industry has become an export industry which supplies Russia, for instance, and Parisians can not compete in this respect Altogether, a large proportion of the remarkable growth of the export trade of Germany is attributed by many authorities to the tasteful decoration of their goods by enterprising manufacturers.

FRANCE.

Cherbourg.—Local tradesmen to whom I have spoken would welcome the advent of British commercial travelers to enable them to deal directly with the manufacturers. For instance, the owner of the leading general bazaar has asked me to mention that he would like to hear of fancy articles or ornamental knickknacks, which find a ready sale in local middle-class houses. He pointed out to me many taking articles in wood and crockery made in Germany upon patterns and designs supplied by him, ornamented with views of Cherbourg and pictures of Normandy folk. In this instance, I confess, I doubt whether anything so cheap and so good for the price could be produced in England under existing conditions.

Havre.—The customs tariff of France (except for wines and spirits) is based, to a very great extent, on the actual weight of the article imported. This system is frequently applied not only to raw materials, but to manufactured goods; and manufacturers should therefore carefully consider how far lightness can be secured without loss of quality. German manufacturers are alive to the importance of this fact and study lightness in the preparation of goods for the French market. Sheffield cutlery, for example, notwithstanding its high reputation, has to a considerable extent been excluded from the Havre market by German competition, solely in consequence of the greater lightness of the German article and its consequent admission into France on payment of less duty than that levied on English cutlery.

ITALY.

Rome.—Figures give a clear indication of the loss to British trade in manufactured articles during the last ten years. Part of the loss in total value of imports is due to the general fall in prices during the period, and part to the development of Italian industries having diminished the demand for foreign manufactures; but

these causes of decrease in total values do not account for the increase of German trade at the expense of British, which is noticeable in many directions, and particularly in some of the more important classes of worked iron and steel and chemicals. Other causes must be sought, and certainly exist, though apparently they are of so complex a nature that there is some risk of error in attempting to define them on broad, general lines. As the result of careful inquiries, I would venture to suggest that the following are among the more important factors favoring German competition: Zeal in seeking orders; readiness to conform to the wishes of customers; offering quotations in Italian currency, the seller taking the risk of exchange; quoting for delivery at the place of consumption, all charges, including duty, paid; systematic inquiry concerning the commercial standing of all likely buyers, so that credits are given with fair security; rapidity and certainty in date of delivery; and, finally, lowness of quotations. As regards zeal in taking orders, I must refer to the well-worn subject of the ubiquity of the German commercial traveler and the absence of any English rivals; but I wish to add a word of warning as to the imprudence of sending out travelers who are not specially qualified for transacting business in the countries they are visiting. The address necessary to please customers, even when accompanied by knowledge of language, is, in my opinion, insufficient without further qualifications. It is essential to understand the habits and ways of thought of foreign nations and, still more, to establish those intimate permanent relations in each important center through which alone proper information as to credits can be obtained, and without which undesirable orders are booked and payments fail, to the great discouragement of the British exporter. Nothing can be more dangerous than the ambition of a young traveler to distinguish himself on his first tour in a new district by the number of orders booked.

* * * * * * *

England was probably the first country to appreciate and manufacture good agricultural machines, and the deserved reputation of English agriculturists was such that enterprising foreign landowners naturally looked, in the first instance, to England to supply them with agricultural machinery. To-day, however, with the important exception of portable engines and steam thrashers, England has practically lost the trade in such machinery. Reaping and mowing machines and hayrakes are almost universally of American manufacture; whilst plows, drills, and other small machines are generally of German or Swedish origin. And the reason of the change is not far to seek. In England, horses are strong and can drag heavy machinery, and farmers are prepared to pay good prices for highly finished, strong machines, solidity being specially appreciated and weight, within certain limits, being immaterial. On the Continent, speaking generally, horses are smaller than in England, and weight is a very important condition, whilst real finish is not fully appreciated and lowness of prime cost is all important. American, German, and Swedish agricultural machinery may not always be of as good material or as well finished as English; but it satisfies ordinary foreign requirements in the more important conditions of weight and price, and consequently it drives English rivals out of the market.

Machine tools constitute another class of exports in which British manufacturers appear to be losing ground through similar and avoidable causes. I recently had the opportunity of visiting one of the most important and successful mechanical works in Italy and noting the country of origin of the very large collection of tools of all kinds. The proprietor is a man of marked intelligence and, I am convinced, quite unprejudiced and only desirous of obtaining the best machinery; and I was therefore much disappointed on observing the comparatively small number of tools of English make in the shop, and further at the fact that a considerable number of the English tools bore the name of commission houses, and not those of well-

known makers. The latter circumstance would appear to indicate that the good English makers have taken no trouble to push their trade in this country and had allowed commission houses to take the orders, the latter generally supplying tools from second-class makers who are glad enough to effect sales under any condition. But besides noting such want of push on the part of the best English tool makers, I learned that in the opinion of the manager English tools were generally made according to old models, whilst more improvements were found in the machines offered by other countries, and that the very best tools of the more complicated types were now being offered from the United States and were necessarily accepted, in spite of their comparatively high price.

PORTUGAL.

Oporto.—With regard to British imports, there has been an improvement over 1894; but I find it is the general opinion that, notwithstanding an adverse tariff and other impediments, our trade could possibly be further improved here, though if this is to be done it will be by the personal exertions of competent travelers or agents. It is of little or no use flooding the place with English circulars. Not unfrequently catalogues are sent to the consulate with the request that they may be kept in case of inquiries being made by importers. These, however, are not in the habit of calling at this office on such business.

* * * * * * *

In machinery, England holds her own, especially with regard to spinning machinery. This is not so much the case with railway plant, and is probably due in part to the greater pains taken by our foreign competitors in suiting the wishes of the buyers in regard to quality and manner of payment, thus offering an inducement to local agents to represent them in preference to English houses. As an instance, I may mention the following case which came under my notice: Tenders were invited by a railway company for some trucks, and among others there was an offer from an English firm. On sending home information of the want of success in obtaining the order, the agent received the following answer: "If, as you say, French and Belgian firms are lower in price than we are, then we feel confident that in comparison the construction of their material will be of a less solid nature than we offer. These remarks as to being beaten in price by French and Belgian makers have come before us frequently, but generally, we are glad to say, have resulted in our obtaining orders afterwards on account of the unsatisfactory result of buyers purchasing from other quarters." Now, an agent, being paid on commission, would have much preferred obtaining the order, even if the "material were of a less solid nature" than that then offered, to waiting for years on the off chance of the cheaper goods proving unsatisfactory. Moreover, in the case in point, which occurred four years ago, no such want of satisfaction seems to have arisen.

Much may be done to meet the demand for light goods occasioned by the stringent duties. It should be borne in mind that among the less wealthy classes in the Portuguese towns especially the love of dress and finery is more conspicuous than in northern countries. The chief idea is to keep pace with the fashion; consequently, stuffs are not required to last longer than a season, and durability is of less importance than first cost.

Even in machinery, the same tendency is observable to a large extent, though the sensible majority of manufacturers prefer the heavy English machine instruments, notwithstanding the added expense in duties, to the lighter and less durable articles imported from other countries.

The market has also to be studied in other ways, which will be better understood by an instance being given. A gentleman wished to obtain from England some lace window curtains. In the catalogues to which he referred, he found all

the quotations for curtains with taped edges. Now, the untaped article passes the custom-house at a duty of about 5s. 4d. per kilogram, whereas the taped curtain is considered to be "made-up" goods, and, as such, pays three times that sum. The would-be purchaser in this case asked a Nottingham house to supply the curtains without tape, but was met with the condition that he should take a minimum quantity of six pairs of each pattern selected. This instance refers, it is true, to a very small transaction; but with the facilities afforded by the parcels post and the economy resulting from direct communication between the furnisher and the consumer, such small transactions could be brought to sum up to a very important total if details such as that of the taped edges were not a source of difficulty.

Again, some goods, such as passementerie, are not allowed in the customs to be separated from the cards, etc., on which they are wound or folded; it becomes, therefore, of importance that these should be made as light as possible.

With regard to sewing thread wound upon reels, it is manifest that the lighter the reel the cheaper will the thread come out. Other instances of the kind will suggest themselves when once it is remembered that the duty is charged by weight.

The boxes, cases, etc., in which goods are packed also pay duty and are an item to be considered. In a recent instance, a series of packages were ordered to be delivered to a shipping agent, who was instructed to forward all of them in one case. Some of the goods delivered were in small boxes, which were inserted in the case just as they were received; and each of those boxes paid, as manufactured wooden goods, a larger sum in duty than they had originally cost.

PORTUGAL—EAST AFRICA.

Mozambique.—Much might be done to push British manufactures in the Transvaal by the employment of commercial travelers and by more frequent forwarding of samples, as also by the display of greater adaptability on the part of our manufacturers in conforming to local tastes or requirements.

When recently in Johannesburg, I was told that English beer would be largely drunk—and drunk in preference to German beer—if only English brewers would supply it in a lighter form.

Lourenço Marques.—German imports to the Transvaal go over the railways by weight, and not by measurement, equally on the local as on German lines. They have an advantage over British goods in that they are delivered from the factory doors in the interior of Germany to the customer in the Transvaal upon a prefixed through tariff, covering all transport charges upon the whole journey. Under this system, the selling prices of German goods abroad can be readily obtained and grasped by both producer and consumer.

In Lourenço Marquez, an agency for the sale on commission of many things made both in England and Germany has been opened by a native of the latter country, and by means of this sample warehouse (if it may be so called) much is introduced to the public that it would possibly be found difficult to make known through any local shop or store. This agent might almost be termed a resident commercial traveler, and there is in the idea—contradictory though it may sound—much to commend. It is one worthy the attention of British manufacturers.

SPAIN.

Las Palmas.—English-made nails are no longer to be seen. Wire nails from Germany from half an inch to 6 inches long have taken their place, and even the essentially British article screw nails are seldom seen here. English locks are quite out of date and useless for the style of building. The doors here are generally double, with narrow framework, and require locks of a suitable kind, very narrow and with a corresponding piece to attach to the other half of the door. The

handle must be of an oval shape to allow the door to shut, or else with a dropping fancy lever to turn the lock, the space being too small for anything else. The French doors are similar in style to those here, and the frame into which the lock has to be set or screwed on is seldom over 3 to 3½ inches in breadth.

Although the metric system is that legally in force, it ought to be understood by all persons trading with this place that it is only legally and nominally so, and in transactions with the Government or under its superintendence. The "vara"* is the only measure by which goods are sold and bought, and no amount of knowledge of legal weights and measures will compensate for not recognizing the actual customs of a country. Almost every pound of imported produce or provisions is sold by the Spanish pound or quintal of 100 Spanish pounds, and consequently articles parceled up or boxed should be in multiples of pounds, or in halves, quarters (arroba), or eighths of 100 pounds. In like manner, every yard of Manchester goods, linens, woolens, etc., is sold by the vara, and would be infinitely better folded in "varas"—a fold much liked by the salesman and buyer, to the former of whom it saves measuring out, and to the latter it secures full measure.

Even where prices are not quoted in varas and pesetas, the metric system is much better than our yards, and hence for quoting, as the tradesmen at least understand it. By experience among the traders here, I know very few of them can work out an intricate British price. They prefer the German and French system of selling by vara, or even meter, at so many francs and centimes, and all refer to the fact that expensive cotton goods are sold in any required length and woolens in multiples of suitable lengths—*i. e.*, multiples of 4 varas for suiting and of 1½ varas (both double width) for trouserings.

GREECE.

The Cyclades.—The usefulness of commercial travelers has frequently been advocated as a means of extending British trade; but the advice, which has generally been disregarded, has even displeased several of our home traders, who merely think of the theme as a handy means for consular officers to explain the cause of British decline abroad. This, however, is a great mistake; and the question is looked upon in quite a different light in other quarters, for no sooner was the war over than several French and German commercial travelers, fully equipped with large displays of samples, made their appearance at these ports. Among the commercial travelers that called at this port we happened to make the acquaintance of one of German extraction, who, besides traveling for several foreign firms, was entrusted to represent also a Paisley firm. His affable and obliging manners, coupled with his linguistic acquirements—the Greek language being as familiar to him as his own—specially struck us as being a sure means of securing success, and we can not but congratulate the British firm on their acquisition. We learned of a novel method employed by him with a view of encouraging their trade, viz, that of giving bonuses of 5 per cent to all their customers on the aggregate amount of business secured from each during the year 1897.

BULGARIA.

Rustchuk.—The main points to be remarked in considering British trade for the year are, first, the success of our cotton goods, and, secondly, the comparatively small value of our imports of manufactured steel and iron. To maintain a position in the Bulgarian market, goods must be the cheapest procurable; and they must be supplied on fairly long credit. Our cottons answer both these conditions. Most of the Manchester houses doing business with this part of the world have local branches or agencies, which are able to discriminate between buyers who may or may not be

*0.914117 yard.

trusted in a way which is impossible for British houses trading direct with customers here. This is not the case with Birmingham or Sheffield manufacturers, who have no local representatives, and who manifest a not entirely unjustifiable reluctance to sell their goods on credit to native dealers. Foreign, particularly Austrian, houses are generally well represented, and they further supply a low-class article, with which ours as a rule can not compete.

ROUMANIA.

Bucharest.—The competition between British and German manufacturers of engines and thrashers is becoming more acute year by year, as the Germans seem to have little difficulty in providing a cheap article and one which does its work very well. In harvesting machinery, the American makers hold the market; and, as these makers seem to have determined to conform to the requirements and usages of this market in every sense of the word, it is probable that they will succeed in enlarging their trade. The Americans also are gradually but surely getting the trade in binder twine, large quantities of which are sold on this market.

SERVIA.

Belgrade.—It may appear remarkable that British trade should be almost entirely unrepresented in such matters as tools and cutlery, of which the total importation in 1894 appears to have been somewhat under £5,000; but the fact is that the Servian purchaser is resolutely conservative in adhering to traditions of shape and pattern, for which, indeed, he cares more than he does for quality. The kitchen knife, for instance, is an important article with which the Serb is accustomed to chop bones and meat; the blade must therefore be especially broad at its insertion into the handle in order that the holder's knuckles may escape abrasion. The German manufacturer yields to this whim and gives the blade the required shape, a concession which British manufacturers have hitherto refused. The result is the triumph of a German instrument, of which the blade turns on bone, over an English knife of about equal price but far superior temper. It is due to the German, however, to remark that he spares no trouble to give a proper finish to the article by carrying the metal of the haft quite through the bone or ivory handle, to which he rivets it, whilst the English haft goes in a part of the way only and works quickly loose. The question of pattern is equally decisive as regards other tools.

TURKEY.

Salonica.—This fact (the scarcity of money), however, hardly accounts satisfactorily for the regretable falling off of the imports from Great Britain as compared with those from other countries. Not only has Austria wrested from Great Britain the position of chief supplier of the wants of this province, but the value of British imports has decreased by £2,500 since 1894, France being the only other country the value of the imports from which has not considerably increased since that date. Belgian iron and hardware is rapidly ousting that from England, and in the case of red cotton goods (hitherto almost a British monopoly) Italy is now gaining the advantage.

Beirut.—The superiority of British over foreign imports is maintained by the trade in Manchester goods and in woolens, but it has not been brought about by any efforts on the part of British firms either to facilitate or improve trade between Great Britain and Syria. It is merely the result of native demands for a class of goods which they are unable to obtain from other countries. Should Germany or France, for example, succeed in manufacturing cotton goods similar to the British

in quality and price, our trade with Syria would suffer considerably on account of the facilities of credit afforded by these countries and the activity displayed by their commercial travelers. There are several other branches of trade where British goods, such as machinery, hardware, cloth, wearing apparel, stationery, china ware and crockery, etc., would find a ready market, if agents of British firms provided with samples of goods visited the country and made themselves thoroughly acquainted with the opportunities offered for opening up any particular branch of business, as is done by foreigners with undoubted advantage to the commerce of their respective countries.

EGYPT.

Cairo.—Trade with England is carried on more and more year by year through native and foreign houses in Egypt. If the volume of British trade has not diminished and has rather increased, the British middleman tends to play an ever less important part here, and is cut out by the native or by the agents of other European nationalities who are content with smaller profits, and also perhaps are more active in creating business.

A certain want of enterprise is noticeable as regards the attitude of British trade and capital towards Egypt. In spite, for instance, of the considerable profit and ready openings for agricultural undertakings in this country, where the sugar industry is annually assuming a more important development, next to no British capital seems to find its way to Egypt, though Englishmen are readily found to engage in far more speculative operations in countries affording far less guaranties of security. Egypt, as Sir A. Milner has said, is "a country which cries aloud for the application of capital to develop its latent wealth;" and this sentence is as true of private as of public enterprise. It is true that manufacturing enterprise in the interior of Egypt is to some extent handicapped by the heavy inland freights on coal. Moreover, the 8 per cent duty on imports, which is not excessive on manufactured articles, is a very heavy burden on coal and raw material. In spite, however, of these disadvantages, the sugar-crushing industry appears to flourish and increase.

In doing business with Egypt generally, and especially in tendering for Government contracts, British houses perhaps fail to discriminate sufficiently between the circumstances of this and other oriental countries; their experiences in other parts of the East leading them to suppose that it is impossible to deal with the Government direct, that all negotiations must be carried on through a middleman, and that even then it is difficult to get their money in.

It is true that warnings have been issued at times by the consulate-general at Alexandria recommending British houses not to supply goods on commission to local Alexandrian firms without making searching inquiries as to their credit and position; but these warnings have only a local application, and at any rate, in the case of Government orders in Egypt, payment is assured and immediate. Yet the number of British firms which compete directly for Government adjudications is far fewer than those of other nationalities.

* * * * * * *

A point which is of importance to the native trader is that continental firms are very much easier about payments than English houses, allowing at least six months' credit and affording ready facilities for extension, so that time is given for a disposal of part of the consignment before payment; whereas English houses only give two or at most three months' credit, and frequently insist upon payment on delivery. It is said to be greatly by these credit facilities that German importers have of late so largely increased their custom. On the other hand, the German mercantile community in Egypt have recently addressed a memorial to their consul-general, drawing attention to the large number of fraudulent bankruptcies which

take place in this country and the insufficiency of the legal methods in force for dealing with them, from which it would appear that the long-credit system is not without its dangers.

MEXICO.

Veracrus.—British trade in Mexico suffers from the exercise of too much economy in the employment of agents and travelers, and too little regard being paid to the question of nationality; for there is no doubt that in commercial competition this question has a greater influence than is generally acknowledged. British merchants anxious to secure or to hold a footing in the market should be prepared to give adequate remuneration for services rendered; and they should realize the fact that, although competition reduces commissions and salaries, there is a fair charge below which capable and disinterested services are not to be obtained, and they will find it more to their interest to employ at a higher cost agents and travelers of their own nationality, and who, perhaps, may have an interest in the business, than to place their interests and, perhaps, secrets of their trade in the hands of foreigners at a salary totally inadequate to retain their entire services, and who are naturally biased in favor of the trade of their countrymen.

With very few exceptions, the class of agents and travelers required are not to be found in Mexico, and, although a knowledge of local business methods and of the language of the country is necessary, this can be easily and quickly acquired; whilst what is absolutely necessary is an agent with a thorough knowledge of the business in hand, of business methods in England, and who holds the confidence of his employers.

Mexico.—The great increase in the imports of American goods this year (1897) must be regarded by British merchants and manufacturers as another warning that, unless they soon make a serious effort, they will have to give up all hope of profiting by the increase in the Mexican import trade, and may even lose part of the very limited share of it they at present enjoy.

COLOMBIA.

Panama.—It may be well to generalize upon the causes that tend to place the British manufacturer at a disadvantage in certain branches of trade herein represented; causes that, trivial as they may appear, have a greater importance and farther-reaching influence than is at first sight apparent. In the first place, exchange, which is cheaper in several European marts, is in certain cases a predominant factor, notably so with regard to Spain, who, in consequence, is enabled to supply cheap-grade cotton underwear at ridiculously low prices. Next, in several instances, and especially so with regard to the competing trade of California and other Pacific States, are the rates of sea freight from Great Britain to Colon, combined with the almost prohibitive charges of transport by rail across the Isthmus. A third, and by far the most important factor in the case of German trade competition, is the conservatism of the British manufacturer.

Bogotá.—As regards the question of competition with British trade, the most important thing in trade with Colombia is the question of packing. Goods to arrive at any interior Colombian town must be packed for mule transport whenever this is possible, but the requirements for this particular form of transport vary according to the quality of the road over which the merchandise has to travel; on some roads, that is to say, a mule can carry a load that he could not on another—sometimes it is a question of weight, sometimes of whether the road is muddy, marshy, rocky, precipitous or tortuous, with rocky defiles, etc., and sometimes the load can only be transported by bullocks where mules can not travel.

Another question to be considered in packing is the equality of loads. A large

consignment of merchandise packed in an infinite variety of shape, weight, and size may be kept waiting until each packet can be paired. If this can not be done with one of the same consignment, the carriers will pair it with one of another consignment, for which they will patiently wait months if necessary, to the loss and annoyance of the consignee, who perhaps will ultimately have to pay exorbitant special rates to obtain his goods, which careful packing might have avoided.

Again, the question of goods arriving in the dry or rainy season—some roads becoming almost impassable in the later period—makes a difference as to the method of packing and consequent economy in transport.

Shipments that are too heavy for mule transport are conveyed by bullock carts in the few parts where a suitable road exists, or are carried on men's shoulders at enormous expense.

PERU.

Callao.—It has been mentioned that the mode of packing is a matter to which importance is attached. There can be no doubt whatever that tools and hardware imported into Peru from the United States and Germany are better packed than English goods. It would seem an easy matter to bestow more care upon such trifling details if it be true that the success or loss of a particular trade may often turn on an immaterial circumstance.

* * * * * * *

The great bulk of importations of fabrics comes from England; but the importation of woolen cloth is principally from France, the style, quality, and price apparently suiting importers and consumers better than the English manufacture.

There is a considerable import trade in such articles as crockery and glassware, wire nails, and wood paper; but these goods come from Belgium and Germany, and it seems strange that English manufacturers do not adapt their make to the requirements of this market. Only a few months ago, I was shown a letter from a firm of Birmingham manufacturers stating that they could not compete with Belgium as regards price in the wire-nail trade.

Continental manufacturers put up their nails and tacks in small, neatly arranged packages, which very much facilitate the sale; but English manufacturers do not care to take this trouble.

Rails, of which the importation is small, have previously come from Belgium; but latterly a trial of United States rails has been made, which has turned out satisfactorily, although the price has been found to be slightly over the cost of those from Belgium.

CHINA.

Chefoo.—In almost every German mercantile house there is at least one German partner or clerk who speaks Chinese; this is seldom found in English houses. We seem to rely on the Chinese learning our language, which they do when it is to their own advantage; but there must occasionally be times when it is a distinct disadvantage to have to carry on negotiations through an interpreter whose good faith is not above suspicion.

Ichang.—British manufacturers must now expect to find active competition in all directions. In piece goods, this is confined at present for the most part to America, though the import of Chinese-made gray shirtings to Sha Shih is noteworthy; but in fancy goods, which are fast developing into a large and important trade, our great competitors are Germany, Holland, and Japan. These three, and especially the first and last, watch the changing fashions of the China market in a sharp way, which doubtless finds its own reward, whilst our home manufacturers continue to follow the same old lines, or with very little change, that held good thirty or forty years ago.

JAPAN.

Tokyo.—While the relative growth of Japan's imports from the United States shows a very large increase in recent years, the amount of exports from Great Britain has increased by a larger total value; but it must be borne in mind that the American invasion has only just commenced, that the ground has been prepared for large extensions in the future, and that unless some unforeseen changes take place, the tendency will be toward encroachment upon the trade hitherto belonging to Great Britain. A glance at the trade statistics will show how rapidly the import trade to Japan of the United States is growing, particularly in machinery, locomotives, and railway materials—articles for which the United Kingdom has hitherto held a monopoly.

This portion of the report can not be closed without a reference to the quick deliveries which can always be obtained from America. As an instance, English locomotive builders required two years for the delivery of an extensive order, while the Baldwin Locomotive Works turned them out at the rate of two a day and shipped the whole quantity within eight or ten weeks.

Another case recently occurred where the English time for shipment of five locomotives was ten months and the price about $12,000 gold delivered in Japan, and American makers offered to ship in fourteen weeks, at about $8,000 gold. The same specification was submitted to both countries. The time allowed for execution of orders by the Japanese buyer is always very short, and the tendency is to make it shorter still. Consequently, prompt shipments are a great advantage, and when in addition the shortness of the rail and sea route via the Pacific coast is taken into consideration, it is apparent that the British maker must, even on the same terms as to price, offer strong counter inducements to insure successful competition.

Nagaski.—In connection with this subject, reference may be made to the ideas which very many English producers seem to entertain as to the enterprising methods of finding new outlets for their goods. At other ports in Japan, English producers, who have written stating that they are anxious to find a sale for their goods and sent elaborate and expensive catalogues, have frequently been brought into communication with the most experienced and most energetic English commission merchants in Japan, firms which might be relied upon to sell to the native dealer any article which could ever be sold in Japan at all. But after the merchant in Japan has taken much trouble, and has, at considerable expense of time, given full particulars of what is likely to be most acceptable here, he finds that the idea of the English producer is that he (the commission merchant) should take not only all the trouble, but also all the risk, with the prospect before him that, if his efforts are successful, if he brings any particular article into extensive demand, his share in the profit will be limited to a trade commission cut down to the very finest point. The United States manufacturer will not only take any reasonable risk, but he will even face an immediate and certain loss, in the hope of being recouped by large and continued profits by and by. This is not the sole reason why United States manufacturers are now slowly but surely eating into the British metal trade. But their enterprise in this respect is an important factor in their success; it makes the commission merchant in Japan their firm ally, and it is one which is well worthy of greater imitation on the part of the British manufacturer.

TONGA.

France, Germany, and Austria still continue to supply this market with llamas, muslins, alpacas, merinos, rugs, and umbrellas, and some smaller lines; Sweden with safety matches; the United States with red wood. This wood goes by the name

of Californian redwood, is very light and easily worked, and when fastened with galvanized nails, it withstands the climate better than any other and lasts longer when exposed to the weather.

Quantity and not quality is what the people of these islands want, and British manufacturers must, if they wish to retain this or any other market, make things of the quality their customers wish to have, instead of sending goods which they consider their clients should, if they are sensible, require. No one doubts that in the lines in which British manufacturers are being gradually supplanted by their German and French competitors in this and other markets, the British article is better than theirs and lasts much longer; but, as it has already been explained, it is not considered the thing, for instance, to go two Sundays running to church in the same garments. On Tongan gala days—such, for example, as the King's birthday, constitution day, the King's coronation, and such like—sports of all sorts are organized, which nearly the whole population attends. It is at these that the lads and lassies like to look well and newly dressed, and if they are able to appear in a good outfit for the day they do not in the least care if it tumbles to pieces next morning, as its work is done. That is why nothing but the cheapest things find acceptance here, and why the French and German goods find favor. It can easily be conceived, therefore, that well-made, lasting British goods do not fulfill the required conditions either in quality or price; they last too long, and it is in this way that, especially in drapery, British manufacturers must alter their tactics and manufacture showy rubbish for those who wish to buy it, if they do not want to let their foreign competitors oust them from this market.

Then, again, in ironmongery, the Tongan does not believe in working harder than necessary, and there are very few trees here which require a man to swing a full-sized ax to get through; they prefer a three-quarter ax, and all those in the market are American, retailed here at from 3s. 6d. to 5s. (85 cents to $1.21). Surely it is not beyond the capacity of the British manufacturer to make an ax that can be sold at the same price; but, of course, if they never take the trouble to send a traveler to see what is required in each market, they can not be expected to know.

Again, every householder possesses a dray. An ideal cart for this country would be a light cart, up to half a ton with broad-tired wheels, for the roads are soft. Hitherto, nothing but the heavy colonial dray has made its appearance, which is far too heavy for the average Tongan horse. Again, almost every man and boy has a 12 or 14 inch so-called butcher's knife, which is hardly ever used for "cutting," but always for "chopping" saplings and light timber and for turning the meat out of the cocoanut shells. These knives are flattened at the hand end, and two pieces of wood, one on each side, are either screwed or riveted through corresponding holes in the iron. This constitutes the handle, which would, no doubt, last for a long time if the knife were only used for cutting; but, as it is, after sometimes an hour's work, the handle splits or the screws come out and nothing remains to take hold of but the flat iron, which soon induces a sore hand. Could not the makers devise some plan by which the handle would be homogeneous with the knife, which must not have a sharp point but a rounded one, as otherwise the point sticks in the shell of the cocoanut when turning out the meat?

I have gone a good deal into detail in these matters, but otherwise how can the manufacturer know what is required; for, although the consulate is inundated with price lists, etc., no traveler from Great Britain has been to Tonga in the last eleven years.

BRITISH VS. AMERICAN SHIPPING RATES: HINDRANCES TO AMERICAN EXPORTS.

It is seldom one can pick up anything indicating that there are phases in the scheme of ocean freight rates so favorable to the United States as to offset, in a measure, the disadvantage of nonownership of a merchant marine.

The Birmingham Post gives to the public to-day some recent correspondence between a firm of British merchants and the British-owned Tyser Line, steaming from New York to Australia and New Zealand. It shows that this British steamship company gives American merchandise nearly half-rate preference in freight rates, notwithstanding the shorter distance. The claim is also made that English-manufactured goods are not accepted at the low American rate, even when offered in New York City; but in one communication, the Tyser people expressed their willingness to give the same rate to British merchants.

I inclose an editorial from the Birmingham Post reviewing the correspondence, and also commenting on a paper on "Shipping rings," read by Mr. John R. Galloway before the economic section of the British Association for the Advancement of Science, which is now holding an annual meeting at Bristol. It is my understanding that what we would call the "freight trust" includes, for operation within Great Britain, nearly all the shipping and railroad organizations in the United Kingdom, and that its power and influence is greater than anything of the kind we know of—a heavier burden upon industry—and it is an undisputed fact that goods have been shipped at times from London to New York and reshipped to Glasgow at cheaper rates than British coastwise steamers or British railroads would have carried them. While the existence of this "freight trust" is, in the main, an advantage to the United States, it must be remembered that Americans exporting goods to interior points in Great Britain find the high inland freight rate at this end of the shipment a factor they must contend against, in common with the British manufacturer and merchant.

MARSHAL HALSTEAD,
Consul.

BIRMINGHAM, *September 13, 1898.*

[Editorial from the Birmingham Post, September 13, 1898.]

Questions of deep interest for our merchants and manufacturers, and especially those who trade with Australia, New Zealand, India, the Straits, and the Far East, are raised in two papers of kindred character, which will be found to-day in another

part of our issue. One of these is an abstract of a paper read yesterday by Mr. John R. Galloway, of Manchester, in the economic section of the British Association at Bristol, on shipping rings in especial relation to the cotton trade; and the other is a précis of a remarkable correspondence which has newly taken place between Messrs. T. W. & J. Walker, the well-known merchants of Wolverhampton, and certain shipping owners concerned in the Australian and New Zealand trade, with reference to the enormous disparity in the rates charged for the transport of similar goods from this country and from New York. Messrs. Walker complain that while the rate charged for the carriage of English iron to Australia and New Zealand is 18s. 9d. ($4.56) per ton, the same shipowners are carrying American iron from New York to the same colony—a much longer distance—for 10s. ($2.43). That is, of course, a preference or bonus for our competitors of just 8s. 9d. ($2.13) per ton, or, say, 87 per cent. Messrs. Tyser & Co., the shipowners in question, do not deny the soft impeachment. They only plead that this preferential treatment of our competitors is forced on them by competition, and that it really entails upon them a considerable loss. To reduce their English freights to the same low level, they argue, would increase their loss, which they are not prepared to do, and they do not see their way at present to level up their American rates. The only comfort they have for English traders is that the low American rates will probably not be of long duration. In the meantime, unfortunately, as Messrs. Walker point out, these preferential rates are killing our trade, more particularly in barbed and fencing wire, wire nails, iron, etc., and it is certainly difficult to fathom the policy of killing a trade that admittedly pays, in order to foster a rival commerce that entails upon the shippers "a considerable loss." This very obvious criticism, however, seems to have touched Messrs. Tyser in a tender place, for its effect is to provoke a retort which throws a curious light upon the temper and commercial ethics of the writer. Messrs. Walker indulgently dismiss it as "facetious," though the strain is evidently intended to be one of withering sarcasm, but less lenient critics would probably describe it as truculent. It is a labored attempt to cast ridicule upon Messrs. Walker's complaint by ironically assuming that they ought to have put patriotism before self-interest, whereas the point of Messrs. Walker's argument in this case was that the two went hand in hand. Then follows a mock proposal, in the very worst taste, for "concerted action" with Messrs. Walker in the direction they are supposed to favor of their sharing in certain proportions any loss that may result from the levelling up of American rates; and Messrs. Tyser conclude by suggesting that they shall publish the proposal as emanating from Messrs. Walker.

This, of course, is simply adding insult to injury; and we think Messrs. Walker are entitled to great credit for the reserve and self-control shown under strong provocation. They simply observe that they consider the matter too serious to be treated in a facetious manner, and reiterate their complaint that in canvassing for American iron at 10s. ($2.43) per ton while they are charging 18s. 9d. ($4.56) for the carriage of English iron, they are promoting their trade in the former, which is said to be a losing one, at the expense of the latter, which is admittedly a paying one; and here, so far as Messrs. Walker are concerned, the matter rests. We shall be much surprised, however, if it is not promptly taken up through our chambers of commerce by other merchants and manufacturers interested in the Australian shipping trade, with a view to "concerted action" of a different kind from that suggested in Messrs. Tyser's sarcastic epistle; and, with a view to their guidance, we would direct attention to the remedy against oppressive shipping rings advocated in Mr. Galloway's paper at the British Association yesterday. The magnitude and influence of these combinations on most of our principal lines of sea transport, we suspect, are but inadequately realized by the general public, though their effect is

often severely felt by the traders dependent upon them. We have had occasion more than once to call attention to the doings of the South African shipping ring and their mischievous effect upon our trade with that part of the world; but it is evident, from the paper in question, that there are other and more potent combinations of the same kind engaged in throttling our trade with India and the Far East, whose methods and principles are equally open to criticism. In the old days of high prices and limited competition, the cost of transport, more especially in sailing ships, was a comparatively unimportant item; but now that we have to meet the rivalry of other producing nations, and that steam navigation has become imperative, even the fraction of a farthing in the cost of an article may be a momentous factor, and we can not afford to disregard the amount of freight charged for the conveyance of our goods to remote markets. From this point of view, it is possible to understand the danger to our trade from shipping rings, or "conferences," as these monopolies are euphemistically styled. Mr. Galloway has been at considerable pains to show how these rings have operated in connection more particularly with the chief markets of India, the Straits Settlements, China, and Japan; and though his remarks have reference more particularly to the cotton trade, it will be found that in the main they are equally applicable to the iron and other staple industries which are dependent upon the same markets. Mr. Galloway shows from authentic statistics that in nearly every case, with the exception of Bombay, the rates charged for the carriage of English goods to the ports in question are considerably higher than those charged for the conveyance of similar goods from Hamburg and New York, and that the difference amounts in the aggregate to a practical subsidy of many tens of thousands of pounds per annum to our competitors, who are thus enabled to undersell us. If Bombay is an exception to this rule, apparently it is owing to the action, not of English shippers, but of native importers who, when the "conference" rate for cotton was raised from 40s. ($9.73) to 60s. ($14.60) per ton, opened negotiations with an outside firm of steamship owners, whose timely appearance on the scene brought rates down to their present reasonable level of 20s. 6d. ($4.99).

Unfortunately, no such influence was brought to bear upon the conferences that control the rates to Calcutta, Madras, Burma, the Straits Settlements, China, and Japan; and the consequence is that in all those ports our trade is terribly handicapped. Mr. Galloway calculates that shippers to Calcutta pay relatively 7s. 8d. ($1.87) per ton more than is justified by the rate ruling to Bombay, and that difference is equivalent on the trade done to an overcharge of more than £47,000 ($228,726) per annum. Another and more serious consideration is that our German competitors pay for the carriage of similar goods from Hamburg to Calcutta only 25s. 6d. ($6.20) per ton, which is equivalent to nearly £30,000 ($145,995) on last year's Manchester shipments. To the Straits Settlements the present charge is about 42s. 6d. ($10.34) per ton, which works out at about 60 per cent more than the net rate to Calcutta. Here again the advantage enjoyed by our German competitors is very great, the rate from Hamburg to Singapore being only 22s. 6d. ($5.47) per ton, or considerably less than half the freight charged from Manchester to Singapore. To China and Japan the freights charged on cotton goods from Manchester are about the same, and work out at 52s. 3d. ($12.71) per ton, while the Hamburg and New York rates for similar goods are only 25s. ($6.08) per ton; so that here again our shippers are very seriously handicapped, the excess charge paid by them, as compared with that payable by their competitors on the same tonnage, amounting to £117,000 ($569,382) per annum.

A similar story might be told in connection with our exports to almost every quarter of the globe. How, then, is the evil to be combatted? The Associated Chambers of Commerce, before whom the question was lately raised, thought

that the case would be met by a resolution condemning preferential rates, and appealing to the Government to refuse all subsidies to any shipping company belonging to a "ring." We are afraid that not much will come of this resolution and appeal. The Government is not in a position to fight monopolies of this kind. If a remedy is to be found, it must be supplied by the shippers themselves, following in the footsteps already described of the Bombay importers. There are no doubt difficulties in the way of a good defensive combination. In the first place, our shippers are all, more or less, under the thraldom of the rebate system, in virtue of which they receive a substantial return every year, representing in the aggregate many thousands of pounds, so long as they remain loyal to the rings or conference lines. Then, again, many of the shippers, more particularly in foreign ports, are acting as agents for the shipping rings; and lastly, they are divided from one another by mutual jealousies as trade competitors. Nevertheless, it would seem that combination is their simplest, if not their only, remedy, and that "to this complexion they must come at last," if they wish to save their trade. In a great industry like the cotton trade, such a federation ought to be comparatively easy of accomplishment; and if some representative body, like the Manchester Chamber of Commerce, could be persuaded to take the matter in hand, we have no doubt that it would soon be carried through. In the case of the iron and miscellaneous trades of the country generally, there may be more difficulty in securing united action, as the interests and requirements of different traders and manufacturers necessarily vary a good deal; but the problem is certainly not an insoluble one, and if it is taken up in the right spirit by the Associated Chambers of Commerce, we shall not despair of seeing the whole of our export trade freed from the blighting influence of shipping rings and conferences, or the power of those combinations restricted within such moderate limits as shall enable our traders to compete, in neutral markets, on something like equal terms with those of foreign nations.

SUPPLEMENTARY REPORT.

To supplement the information contained in my report of September 13, I inclose an important letter written to the Birmingham Post by G. H. Brydes, esq., of this city. This correspondent's showing is that the Tyser Line rates are favorable to American merchandise, because the line is at present engaged in a warfare against a combination of New York "broker merchants," owners of a line of American sailing vessels, which has been so powerful that until recently even steamships have been kept out of the trade. The letter reads:

The interesting correspondence in your issue of yesterday has opened up a wide field for an expression of the different views held by your many readers at home and abroad. * * *

For years, the carrying of goods between America and Australia was done by American sailing vessels; there were no steamers in the service. These sailers were and are still in the hands of a group of New York merchants. It was often asked why there was no steamer service from New York to Australia; but these New York "broker merchants" ignored the question and stuck fast to their sailers, which, loaded at a rate of something like 30s. ($7.29) per ton, were to them a source of considerable income. Early in the present year, a London firm of shipowners

decided (all honor to them) to put a steamer on the berth at New York for Australia and New Zealand, at rates which would secure them plenty of cargo. This action so annoyed the New York shipowners that they at once reduced their sailing rate very considerably and chartered a steamer to fight the one sent from England. The rupture continued for some months; then the London firm joined hands with two other firms of shipowners and so formed a "ring;" and here, I think, is the cause of Messrs. Tyser & Co.'s present action. They (Tyser & Co.) are not in this newly formed "ring," and being, I presume, desirous of getting a share of the traffic from America to the colonies, have taken the present (by no means new) method of extending their business, which may result in their ultimately being also admitted into the "ring." I think it not unreasonable to say that all business men do at times use extraordinary means to gain their ends, and knowing, as I do, some little about American competition and the ways of ship brokers, I can not look upon Messrs. Tyser's action as unpatriotic, and I am sure they will be most unwilling to continue quoting rates which to them are a considerable loss. For a time American goods will have an advantage, but I sincerely hope it will shortly end, or the rates of freight from London will have to be reduced on such lines which we find the greatest difficulty in selling against our American brethren.

The introduction of steamers from New York by an English line gave English merchants a chance of selling American goods which they did not before possess, and only those who have suffered through the tactics of the American ship brokers can fully appreciate the additional facilities afforded thereby. It is quite true that there is a growing preference in Australia for American fencing wire; but that is on the score of cheapness, and, as English wire has for years been prohibitive, there will be no loss to this country. Wire nails, like fencing wire, have been purchased in Germany; therefore, if freights are equal, it is only a question of choice, viz, will merchants send their orders for these lines to America or Germany? Messrs. Tyser & Co. naturally decline to carry goods at 10s. ($2.43) per ton weight on a through bill of lading from London via New York to Australia; but they are quite willing, I take it, to accept cargo (either English or American) in New York at the exceptionally low rates quoted. Such being the case, let the English manufacturers who are anxious to put fencing wire, wire nails, etc., in the hands of their colonial customers sink 5s. per ton in their price, and contract with one of the Liverpool-American shipping lines at an equivalent freight, and take advantage of the opportunity offered by Messrs. Tyser & Co. The Americans have often availed themselves of similar opportunities, and sent wire via London to Australia cheaper than direct from New York.

* * * * * * *

I understand that these New York combination export and shipowning houses have their selling agencies so well established in Australia and New Zealand, that no individual American manufacturer or merchant desiring to sell goods in those countries can do so profitably without both selling through them and shipping goods on the sailing ships owned by them. The American manufacturer has been compelled to submit, not only to the slow time of the sailing ships, but to very high freight rates and big commissions on goods sold. It can be readily seen that to get business, and perhaps ultimately to get into the combination itself, the Tyser concern must give very low rates. If American manufacturers and legitimate merchants interested in Australian and New Zealand trade would

organize now, and perfect their selling arrangements in those countries, they might take advantage of the present freight fight and complete a scheme of independence by making permanent arrangements with the Tyser or some other steamship line, guaranteeing the freight carriers a reasonable profit and securing for themselves reasonable freight rates in the future.

In this connection, it may not be amiss to state that there is also need of organizations of American manufacturers for handling our rapidly expanding trade in other directions.

I know of one large manufacturing concern in the United States which feels certain that its agents in a great northern country, now in process of a very rapid development, have been making imitations of its special article of manufacture; in short, that its trademarks are being counterfeited by its own agents. But what is the firm to do about it? These agents—a large establishment of commission merchants—have branch houses everywhere in the great and growing country referred to, and while they are practicing a fraud on the American manufacturer, they are clever enough to sell two of the genuine articles to one of the counterfeit, and the American manufacturer can not afford to lose this splendid business, despite the fact that he is being cheated out of a third of his due. This concern also represents seven or eight other American houses of importance, and nearly every American house opening a business in that country must accept it as an agent. Last night I met an American who is going to that country in a week, and he said that, while he knew all about the conditions there, he expects to make the firm in question his agents, because it was either a case of doing so or staying out of the country. A combination of the American firms now doing business in that country, and the establishment of their own agencies, might be effective.

MARSHAL HALSTEAD,

BIRMINGHAM, *September 21, 1898.* *Consul.*

SUGGESTIONS FOR UNITED STATES EXPORT TRADE.

The question of the methods to be adopted for the further development of our export trade is one which has ever claimed the attention of consular officers. Several elements have, however, contributed to render their efforts sterile to a great extent. Among these have been: (1) The degree to which the attention of our merchants and manufacturers has been devoted to the increase of their home trade; (2) the distance of our country from the Continent, with the consequent difficulties and loss of time in correspondence; (3) the lack, in

the case of many firms, of an organized export department, which would understand packing goods and systems of discount and payment.

Before proceeding to the discussion of these elements, I shall venture to discard as impracticable the suggestion that samples be exhibited in consular offices and information furnished by the officers. Everyone who has served in a consular capacity knows to what an extent his time and attention are monopolized by the delicate and numberless requirements and responsibilities of his post. Any attempt at a union of the two occupations would be fatal to both.

Referring to element 1 above mentioned, I shall say that the United States finds itself much in the same position occupied by Germany some years ago. The reorganization of that country, following upon the war of 1870, was marked by a period of unexampled activity in the arts of manufacture. Production increased to a fabulous degree, and it was soon impressed upon the German mind that a large export trade is, after all, the principal safeguard of a solid financial system, besides furnishing a valuable reserve to national industry in case of panic and in periods of commercial depression at home. Following up the realization of this purpose with admirable skill and undaunted perseverance, in which every department of the Government joined, that country has succeeded in obtaining results of which heretofore Great Britain alone has been able to boast. There are numerous indications that the time has come when the United States has about reached the maximum of internal development, and will be forced to seek outlets for its surplus products, the results of industries second to none in the world. This movement, coming from all parts of our country, has never been so apparent as at present.

Referring to elements 2 and 3 above mentioned: In a great measure, the continental outlet for American goods is a thing to be created. American firms are, in this regard, very much in the position of explorers. It has been said to them: "You should send catalogues in the language of the country—prices and weights and measures to correspond. You should send agents and samples and consignments of goods. You should organize an export department in your establishment." But it appears even to a very superficial observer that before a firm (and there are many which could ill afford the risk) incurs such expense, it should know whether or not its goods are suited to the market sought, and whether they can compete with those of other countries.

This premised, I come now to discuss the question which forms the subject of this report, and which, after mature consideration and with the belief that a very extended field exists for American ex-

port, I consider to be the most practical, economical, and rapid means by which our industries can take their proper place in the foreign trade of the world.

This plan consists of the establishment at all cities or ports where consular officers have knowledge that little or no direct trade with our country exists, and where it would appear that under proper conditions an export trade might be created, of what might be called American chambers of commerce or export bureaus. The capital should be furnished by "shares" subscribed by American residents, a class constantly increasing in Europe. No legal obstacle existing (and this would be the most important element for the success of the scheme I propose), the Department of State should authorize such institutions to place themselves "under the auspices of the consuls of the United States," and "under the supervision of the vice-consuls of the United States." This would be a guaranty on the one hand that the institution is reliable, and on the other that its business will be strictly commission work, at the very lowest possible rates. It would inform firms why their goods are not salable, exhibit samples of all such as might be sold, and translate and distribute catalogues. It would accept—strictly upon commission—small lots of goods to be sold as experiments; it would undertake, when articles met with success, to work up a regular trade until it should become necessary or desirable to transfer the business to responsible houses, representing specialties in the various lines of trade. In short, it would act as the disinterested pioneer abroad for the export trade of the country.

The plan need not be carried out in an exaggerated form. A few thousand dollars and one or two properly chosen employees would suffice for a beginning in each city. The shareholders, in these days of low interest, should be contented to earn a 5 per cent dividend, and all profits should be credited to a sinking fund, destined to reimburse the shareholders and make the institution self-supporting, so that it would by degrees be enabled to act for American firms for a merely nominal sum, and at last gratis.

The extraordinary facilities and benefits afforded the exporter by this plan may be seen at a glance, and those partaking in the financial support of the scheme would have the satisfaction of contributing to the future commercial greatness of our country in the markets of the world.

ATTILIO PIATTI,
Vice-Consul.

NICE, *September 27, 1898.*

"COUNTRY-DAMAGED" COTTON IN ENGLAND.

Among cotton men, both on this side and in the United States, there is a warm renewal of the agitation against "country-damaged" cotton. Conferences are being held between representatives of the Liverpool cotton trade and the insurance companies, to settle upon a plan of action which will throw the burden of the loss caused by "country damage" to cotton where, they say, it properly belongs, viz, upon the American producer or seller. Under the pressure of keen competition, the insurance companies, some years ago, included "country damage," and, indeed, practically gave insurance from the moment the cotton started on its journey at the interior point in the South until it was deposited in the warehouse at Liverpool or Manchester. So great, however, have been the losses through "country damage" that the insurance companies are very anxious to relieve themselves of this risk, it being claimed that, under the circumstances, it is not a legitimate item of insurance. American underwriters have estimated that the claims arising from "country damage" to cotton delivered at Liverpool last season, footed up $500,000. Authorities here say that this is a very conservative estimate. Attempts have been made several times recently to induce the spinners of this district to accept the cotton as received here, and to have an allowance made for the "country damage." The spinners, however, positively refuse to accept any cotton unfit for spinning. When the cotton arrives here, the "country-damaged" portions must be picked out and the bale must be put into a condition fit for the spinner to use.

There are two propositions under consideration by the trade and by the insurance companies. The first is, to advance the rates; the second is, to exclude "country damage" altogether as an item of insurance, leaving the trade on this side to collect the amount of the damage from the seller on the other. There is much discussion in regard to the person upon whom the loss for "country-damaged" cotton falls. The general opinion here is that in the end it falls upon the grower. It is said here, however, that the cotton grower expresses himself as quite indifferent in regard to this matter, claiming that it makes no financial difference to him whether the cotton gets to Liverpool in perfect condition or is "country damaged"—that he can not afford to take precautions against this class of injury.

There are some shippers in America who claim that the Liverpool trade is altogether too particular. It should be remembered, how-

ever, that this is the best foreign market for American cotton in the world, and nobody familiar with the condition in which our cotton arrives at Liverpool can dispute the claim that there is urgent need for reform. There is no other valuable product that comes into Liverpool from anywhere in the world so badly protected, and on which there is such a loss because of careless packing and handling, as American cotton.

Some months ago, an expert connected with the Liverpool Marine Salvage Association went over to the United States, on the suggestion of representatives of the trade there, to investigate the subject of "country-damaged" cotton. This gentleman, Mr. James MacCabe, is very emphatic as to the great carelessness of the cotton growers and of the transportation companies in the matter of protecting cotton from "country damage." He asserts also that the inspection at New York is not thorough enough, and he gives me a number of instances. He states that there is among the cotton growers a widespread opinion that rain and mud do not injure cotton. Mr. MacCabe asserts that American buyers and spinners would not accept a large proportion of the cotton that comes to Liverpool. If wet cotton be put into the hold of a ship, the damage is multiplied by the time it reaches its destination. "Country-damaged" bales that arrive in Liverpool have to be stripped, so that all the damaged cotton can be picked off; and the bale must then be recased with new canvas before it is sold to the spinner. The American producer, therefore, not only sustains a loss upon the damaged portion of the cotton, but he must also pay for the labor of packing and recasing. In buying the cotton, the exporter must take into consideration the amount of premium payable to cover the risk of "country damage," and is therefore not able to pay the producer as much for the cotton as he otherwise could.

Last June, the Liverpool Cotton Association sent a letter to the New York Cotton Exchange, indorsing the proposition that a uniform size bale be adopted, the proposed measurement of the gin boxes being 54 by 24 inches, enabling bales to be compressed to a density of 38 to 40 pounds, against a density of 27 pounds in the present size bales. This proposition has also been indorsed by the cotton exchanges of Havre, Bremen, and many of the Southern States. The adoption of this proposal would, in the opinion of the Liverpool Cotton Association, "most effectually preserve the bales during transportation, and enable them to be brought to their destination in comparatively sound condition, and not in the ragged and mutilated state in which they too frequently arrive." At present, a uniform width of canvas is used for covering bales of cotton, although the bales themselves are not all of a uniform size. The

standard width is sufficient to cover the smaller bales; but the cotton of the larger bales is exposed, and, owing to the great carelessness in the handling of the cotton in America, a great deal of it is damaged by mud or rain. The secretary of the Liverpool Cotton Association, in his letter to the New York Cotton Exchange, says further:

With regard to the marking of cotton, I am requested to ask your exchange to use its influence to urge the desirability of greater care being taken than at present.

It is highly desirable that every shipper should put a distinct stencil brand on each bale; for then, should the class mark become illegible, there would be no difficulty in identifying the property, and it would also be a distinct advantage to have the bale marked on both sides, so that if one class mark became obliterated by accidental damage, the other might still be made out.

As regards canvas, there is no doubt that the bales should be covered with canvas other than that in use at present. It is true, it is heavier now than formerly; but this increase in weight is not the result of a closer, better woven canvas, but simply of increased thickness of the warp, leaving the woven twine pretty much as it was. The canvas is thus more open and takes the mark no better. What is wanted is a closer texture, which would carry the marks more clearly and give the cotton itself better protection.

It can not be too strongly urged upon the planter and the merchant, as regards the pressing, covering, and marking of bales, that it is directly to their interest to do everything within their power to enable cotton to arrive at its destination in the best possible condition—the less waste there is, the more the buyer on this side can afford to pay for the cotton; the more clearly marked the bales, the less inconvenience and loss he suffers; and in fixing the allowance he has to make between American and Liverpool prices, all these points have to be taken into consideration.

In addition to the above, members of the Liverpool cotton trade urge that the American railroad companies should cease carrying cotton on flat cars, as cotton so carried is not only exposed to the rain, but is liable to be set on fire by sparks from the locomotive.

Cotton men here say that one reason why American cotton is so poorly packed is because the producers do not fear competition. Undoubtedly, in this market, American cotton is king. Mr. Thomas Ellison, of Liverpool, is recognized both in the United States and in this country as one of the greatest living authorities upon the cotton industry. In a recent article in the Liverpool Daily Post, he says that American cotton is rapidly supplanting native and Indian and Chinese cotton in Japan. The United States figures have held third place since 1890, but this year they will take second place; and, if prices remain low, the American fiber will eventually take the first place.

There is generally, both on this side and in the United States, a very complacent, and even confident, view taken as to the future of American cotton. Most people ridicule the suggestion of competition, yet it is worth while to consider the possible effects of the

changed conditions growing out of recent events in the Far East. Take Egypt, for instance. The high quality of Egyptian cotton is testified to both in England and the United States, by the price it commands. The production of Egyptian cotton has, up to the present, been limited; but the opening up of the Nile Valley and the Soudan by the Anglo-Egyptian forces, and the consequent establishment of civilization throughout that region, may lead to a substantial increase of production of cotton and a lowering of price. The London Globe a short time ago announced that the Government of India was introducing Egyptian cotton into that vast dependency. The British Blue Book shows that in 1893, there was imported into England Egyptian cotton to the value of $26,073,010, and in 1897 it increased to $31,514,427. In 1896, the exportations of Egyptian cotton from the Liverpool consular district alone to the United States amounted to $770,294, and in 1897 the exportations increased to $1,656,300. In 1893, the value of the cotton imported from the United States into the United Kingdom was $109,470,654, and in 1897 it was $119,349,513. The importations into the United Kingdom from India were, in 1893, only about one-ninth of the importations from Egypt, and they have fallen off considerably since then; but with the introduction of Egyptian seed into India, it is thought that there may be a considerable increase of growth and consumption of Indian cotton. Those who look forward to the possibilities of competition between Egyptian and Indian cotton on the one hand and American cotton on the other, argue that American cotton has almost reached its lowest point in the cost of production, while the cost at Liverpool of Egyptian and Indian cotton will grow less and less as facilities for cultivation and transportation increase. Not only is the Egyptian product of a very superior quality, but it reaches this market in the best condition of any cotton. Then there are possibilities—remote, of course—as to Chinese competition.

A new cylindrical bale has made its appearance here. It is known as the Lowry bale, and is entirely different from the cylindrical bale described in CONSULAR REPORTS of February, 1898. The Lowry bale is a cylinder formed by a number of disks of cotton, fastened together by wire binding running longitudinally, each wire passing through a hole in the center of the bale. The bale is inclosed in a cotton canvas bag. I find a variety of opinions as to the future of this bale. One gentleman, to whom a number of bales was consigned, told me that he would decline to handle any more unless some improvements were effected. He complained that not only was it difficult to sample the bales, but that the spinners found it very hard to manipulate the cotton so as to feed it into the machine in a loose condition; but his greatest objection was that the

cotton at the center of each disk was so hard that it had almost become woven, like flattened-out rope. He said that the spinners would not have anything to do with the bale in its present shape. On the other hand, an official representative of the cotton trade here informs me that he has heard very good reports as to this bale. Certainly, the cotton gets here without any loss from defective baling or from "country damage."

Speaking generally, the trade of Liverpool would be perfectly satisfied with the square bale if it got here in good condition.

JAMES BOYLE,

LIVERPOOL, *September 29, 1898.* *Consul.*

UNITED STATES PRODUCTS IN BRAZIL.

Consul-General Seeger sends from Rio de Janeiro, under date of August 30, 1898, translation of a letter from Mr. Othon Leonardos, jr., a prominent Rio merchant, in regard to the introduction of American products into Brazil. The letter reads, in part:

There is a large field here for the products of American industry. The two greatest impediments to the expansion of American trade in Brazil are poor transportation facilities and the want of direct representation of your manufacturers. As a rule, we have in Rio but two old and slow steamers a month from the United States, and their import trade with Brazil is so organized that there are no direct relations between the American manufacturer and the Brazilian merchant. Everything is done through more or less expensive commission men. The lack of an American bank here is also a general drawback. American manufacturers ought to have a bureau here in which there would be a permanent exposition of their products.

England, France, Germany, Portugal, Italy—all these countries have their lines of steamers and their banks here; their capital is being constantly invested in industrial and commercial enterprises. What does your country possess here? No line of steamers, no banks, no industrial enterprises; there is no investment of capital, with the exception of a few commercial houses.*

In regard to the merchandise handled by our house (Leonardos & Co.), I will relate my personal experience concerning articles of American manufacture. My efforts to introduce these goods in the Rio market have been very successful. Cut glass and molded glass are of importance, and I will speak of them first.

Cut glass from Fairpoint competes easily in quality and beauty with the English and French article. It is somewhat higher in price, but sells readily on account of its beautiful designs. The moldings and pressed glassware of certain American factories are as well made and as white as those we import from other countries; they are perhaps better, and, their price being lower, I think they will in time find a good market here. The same applies to bottles, jars, and other arti-

* NOTE BY CONSUL-GENERAL.—Also the very successful establishment of the Diamond Match Company and the refinery of the Standard Oil Company, which latter, however, is not in operation now, on account of unfavorable tariff legislation.

cles used by druggists. I think they can easily compete with products from other countries.

American plated metals, silver and nickel plate, from the factories of Reed & Barton (Connecticut), Meriden Britannia Company, and others, are beginning to be favorably known in our markets, and, owing to their price, can well compete with the metals of Elkington, England; Christofle, Paris; Krupp, Austria; and others. I may remark, in this connection, that American plated ware pays only half the rate of duty that plated wares from other countries pay; copper entering into their composition, if at all, in a very small proportion. The importation of plated ware from the United States is susceptible of great development.

American petroleum lamps are not known here; but their quality is superior to those we import from Belgium and Germany. Their price is the same, or even lower.

I have thus given an account as far as my own line of business is concerned. As to other American products, they are beginning to be well known in our market, but as yet are not largely exploited, for the reasons I have mentioned above.

American leather, electrical appliances, photographic apparatus, agricultural implements, and all kinds of manufacturing machinery, bicycles, preserves, etc., are well known and greatly appreciated here. It only remains to strengthen the ties between our two countries, by improving means of communication, and securing for commerce and trade with the United States the proper representation here.

BICYCLES IN JAVA.

I have received so many inquiries lately from bicycle firms about business prospects here, that I deem the matter of sufficient interest to form the subject of a special report.

The use of bicycles, which a few years ago was unknown here, has within the last three years advanced tremendously. There are now, I estimate, between 3,000 and 4,000 bicycles in the Island of Java, and the number is, on the whole, increasing. Wheeling is confined entirely to Europeans, half-castes, and Chinese, the Arabs and natives not having taken it up. Elderly people do not ride, as they do at home, and women very little, as it is considered immodest for a girl over fifteen to ride a bicycle. I do not, therefore, recommend sending any ladies' wheels here.

About 60 per cent of the wheels in use here are cheap, and the majority of these cheap ones are German. This is due not only to the enterprise of the Germans, which has far surpassed that of any other country, but also to the fact that people here are very close and penurious, and always buy the cheapest article obtainable, regardless of quality.

Of the better grade of bicycles, nearly all are English. These were first in the field. They are very heavy and clumsy, and ought to be easily supplanted by our lighter and better-made machines.

There are distinct signs that a few people are appreciating the fact that it pays to buy a good wheel, and if that idea spreads (ideas are slow to spread here) our manufacturers should have a great opportunity.

Strange to relate, the most fastidious and the most willing to pay good prices are the Chinese, who are becoming enthusiastic bicyclists, as they are better able to stand the heat than Europeans.

Although the use of bicycles is spreading steadily all the time, the increase is not at the rate of two years ago. The reason for this is that when everyone who wanted a bicycle had bought one the demand at once ceased and has since been merely from newcomers or boys growing up. The idea of buying a new machine every year, as we do at home, is incomprehensible to people here, and the wheels they bought two or three years ago will be made to last until they drop to pieces.

The wear on wheels is not very great. Long-distance riding is unknown, although the roads everywhere are almost perfect. The sun, however, is hot, and the only time one can ride is for an hour in the early morning and about the same time in the evening. Riding at night, even with a lamp, is looked upon with disapproval and suspicion, though it is not prohibited. Consequently, with care, there is no reason why a wheel should not last ten years. In spite of all this, the bicycle dealers maintain that the business is increasing slowly, and they think that with proper effort a very large number of additional converts to bicycle riding could be made among the Chinese.

I am frequently asked to give the names of reliable importers who would act as agents for American firms. Aside from the hesitation I feel in recommending any particular firm in preference to others, I must emphasize the absolute uselessness of trying to arrange business of this sort by correspondence or circulars. It is a waste of time and paper. To illustrate: Within the last two years, there have been sold a few American wheels of various makes, which were introduced through Dutch or English firms. They were sold more as curiosities or samples than anything else, were not of very good quality, so as to reflect credit on American manufacturers, and were sold by firms who were far more interested in pushing cheap German machines. Therefore, there is nothing to be hoped for in the way of increase of demand for them.

Recently, however, a certain American bicycle firm, having at last become impressed with the futility of circulars and correspondence, sent a man here to arrange agencies and terms. He has, in a month, been all over Java, and has been conspicuously successful in every city, not only in the quantity of wheels sold, but in the terms on

which he has sold them. Previously, the firm had sold very few and had no prospects. Now, I venture to assert that three-fourths of the new wheels of good quality sold within the next six months will be those of that firm, because they are being actively pushed; and the terms this American representative arranged with the agents here are such that it is to their interest to sell his wheels only.

The usual method in business here, hardly ever varied, is to ship goods to be sold on commission, credits being very long—ninety days, six months, and sometimes even a year. This American representative, however, by dint of talking and personal argument, has managed to arrange such terms that his company will get cash for every wheel it sells. This is unprecedented, and could never have been done in any way but by an American agent on the spot. He tells me that the prospects are bright for American bicycles, but that they must be energetically pushed or it will not be worth while trying.

As regards shipments, the best way is to ship via Liverpool, London, or Southampton, the two former preferably; thence by English steamer direct to Batavia. It is possible and easy to ship via Holland or via Singapore, but is far more expensive and is not recommended.

As regards details, there is not much to suggest. In the east of Java, people seem to like the steel rims; in the west, the wooden rims. I do not know why, for I think climatic conditions have little to do with it. Any kind of bicycle, if kept clean and in good order, will stand the climate very well.

Double-tube tires seem to be preferred, though there is no motive apparent, except that they are the fashion; and, as turned out by German firms, cheap—likewise worthless.

In my opinion, the kind of wheel it would best pay an American concern to push would be a good medium grade. It is hardly worth while just yet to try to sell the very best, as few people are willing to pay the prices. On the other hand, in the very cheap grades it is useless, as well as bad policy, to attempt to compete with the Germans. Let American goods be well made and honest, and, if properly pushed, they will surely find a market in an island where the roads are perfect and where there are 40,000 Europeans (including half-castes, who are officially called Europeans) and hundreds of thousands of Chinese.

The Dutch are very conservative, but once they give you their confidence and trade you have it for all time.

While I am always glad to answer questions and be of service, I wish here to reiterate the uselessness of writing me letters asking for addresses and sending catalogues. People here do not want

catalogues; they have been fooled too often. What they want is bicycles and men to talk to, who can do business with them face to face and explain the merits of their wheels.

Those companies who are not prepared to follow this advice had better put Java out of their minds and be content with markets nearer home. I may add that this advice applies to other things besides bicycles.

SIDNEY B. EVERETT,

BATAVIA, *August 25, 1898.* *Consul.*

OPPORTUNITIES FOR AMERICAN TRADE IN GERMANY.

Excellent opportunities are being offered here for the importation of American tools, electric appliances, and all kinds of articles used in the construction and equipment of railroads, etc. Everywhere, from one end of the Empire to the other, lines are being opened, extended, or improved.

This city is just now contracting with the local electric line to extend its plant in four different directions. The new lines, when built, will be as long as, if not longer than, those now in use. For a long time city ownership was discussed; a committee was appointed to consider the matter. Siemens & Halske, the "Union," and others made bids; but it was finally deemed best to let the company make its own contracts and build the new lines.

It seems to me we might sell millions of marks' worth of the wooden parts for cars, as well as rails, wires, apparatus, etc. It is impossible for consuls to constitute themselves active agents of United States houses. The best they can do is to watch markets and point out possibilities to American merchants and manufacturers. If we "worked" this Empire and the whole Continent as carefully as Germans "work" the United States, from Portland, Me., to Portland, Oreg., our exports of tools and machinery here would swell within a few years to double their present proportions. Only a few of the "bench men" know how much better are many of our tools and machines than those made in Germany. There is hardly a large house here which does not take our leading technical papers. How many American houses take German technical papers? And yet better technical papers are published nowhere else in the world.

The superiority of many of our tools and appliances is acknowledged. Evidence of this fact is found everywhere in the fairly successful imitations made by machine builders in Mannheim, Magdeburg, Leipzig, Chemnitz, and Berlin. If imitation is the best flat-

tery, we have enough of it. Even as I write, a large tool maker, not a mile from Chemnitz, is imitating machines bought, till quite recently, in Philadelphia. The machine is said to be the best gear cutter in the world. To-day they are being successfully built here. If the manufacturer or inventor in America neglected patent rights here, he has no good cause to complain; but I think his sales in this Empire will be at an end as soon as the manufacturer here can fill orders. I can not too strongly counsel care in patenting inventions. Nor can I help calling attention to the fact that there are 52,000,000 pretty well paid people in the cities and on the farms of this Empire, who live very much as we live. Their dress, food, homes, factories, farm life, etc., are not very unlike that of the seventy-odd millions in the United States. Energetic and enterprising efforts must make markets in Europe for many of our manufactures and products. "Knockdown" furniture for offices and homes must sell, if the right effort is made. I saw a simple oak rocking-chair advertised for 27 marks ($6.42) that would cost with us possibly $2 retail. Wood-working machinery (especially for small shops), gas engines, and the thousand and one tools and contrivances to sell which agents travel all over the United States would certainly sell here, once live agents speaking German or the language of the country in which they travel come to push them. While I have said that the Germans should be met in Asia, Africa, Oceanica, and South America, I would by no means have it understood that I deprecate efforts to establish markets here. I mean that markets here are, as a rule, precarious, while those in other parts of the world may be made permanent.

The German has no hesitation in taking American machines apart for the purposes of imitation. Besides, his patent laws put it out of the power of outsiders to import into the Empire for a very long time. If the thing is patented here, it must be made or manufactured here; if it is not patented, it will be imitated. In either case, unless provided with enormous capital, the American is compelled to give up a large part of his profits.

American shoes have put in an appearance in the shoe-shop windows of every city. I am sure that shoes retailing in the United States for $3 to $5 would sell here at the same, or even better, prices. Among the masses (so called) one can hardly count on long-continued sales in these lines, for imitations and cheap goods will wipe out competition.

Among the many articles that will certainly sell are office fixtures and furniture. I saw an imitation Shannon register sold yesterday for 420 marks ($100). It stood about 5 or 6 feet high, was a little more than a yard wide, and had about eighteen to twenty-five

drawers or compartments. The price seemed absurd; but the prices of furniture over here are high. Plaques for oak, pitch pine, or other hard-wood flooring should pay; for hardly a house goes up now—certainly none of any size or pretensions—that does not put in hard-wood floors in the form of square or oblong "tiles."

Silver and plated ware would sell, in my opinion, if properly pushed; and many other articles of hardware that lighten labor to carpenters, smiths, and mechanics in our country. The most successful sales this consulate ever recorded were made by men who shipped wood-working machines to Hamburg, hired a wagon and interpreter, and went from city to city. They were always able by wire or mail to keep up their supply. Hammers, handsaws, and vises would surely sell if properly advertised and pushed.

The books of United States hotels are burdened with the names of Germans resident or traveling in the United States to sell German goods, while hotel books in all big German cities are burdened with the names of Americans who come here to buy. The Empire sends us manufactured articles worth hundreds of millions of marks; it takes from us the products of our farms, and burdens these with what seem to be farfetched restrictions. While writing this report, as if to justify this last assertion, the following letter was received:

The undersigned party carries on a dairy in Zwickau, together with the sale of Mohr's products. I am obliged, under contract with Mr. A. L. Mohr, Bahrenfeld, to sell his oleomargarine, as well as his meats, which are of American origin and which are inspected at Hamburg by a sworn inspector. After being found faultless, the shipment is sealed and a certificate inclosed. The city of Zwickau passed a resolution, sanctioned by the government of the kingdom of Saxony, that no meats shall be admitted for sale, except it can be proved that the animal was inspected before and after killing and found healthy. The inspection must be done by a German veterinary surgeon, and the animal must be killed in Germany. Not being able to prove this, all my goods have been seized and will be sold at auction in the slaughterhouse as inferior goods. I have protested against the measure, and the affair is now before the district authorities. I have fully informed the firm of A. L. Mohr. They want me to have the matter settled by a lawsuit. Mr. Mohr also writes that, according to the treaty between the United States and Germany, the import of meats is free; further, he advises me to refer the matter to the United States consulate and humbly ask for interference and protection, which I hereby do. Any further information respecting this matter will be gladly given.

Yours truly,

MAX PATZER.

I may add to the above that Chemnitz's leading paper is out this morning in an article again calling attention to American shoes, and urging action on the part of the Empire's manufacturers against the rapidly increasing danger from United States competition. It claims, without pointing out where, that American officials have admitted that "rubbish" (Schundwaare) was sent over and sold in the German

markets; that American manufacturers have been warned against former practices and urged to send only good shoes to this country, since one shipment of "rubbish" is calculated to bring the whole trade of the United States here into bad repute, etc. The article ends with this self-complacent conclusion:

> That this warning will help is doubtful; for if American shoemakers send good shoes to Germany, they must ask prices so high that German manufacturers can easily compete, and this the Americans want to avoid. The situation will remain as it was, the United States unloading cheap goods on the German market.

I can only repeat what Consul-General Mason, of Frankfort,* and other consuls have so often said, that a large market, not only in this Empire, but all over Europe awaits intelligent and energetic measures to introduce American shoes. Our $2.50, $3, $4, and $5 shoes are better by far than anything made here at the same price. The only country in which competition will be hard is Austria. There, especially in Vienna, good shoes are made at prices similar to those in the United States. A combination of manufacturers, with a central receiving and delivery office in Hamburg, could easily cover the German and Austrian end of the Continent; another in Antwerp could cover Belgium and Holland. Germany sees American shoes gaining against every effort to keep them out. While I do not believe a bad pair of shoes was ever sent over, I think it wise to urge our manufacturers to send only the very best goods they can give for the money. Every inch won here will be worth miles in other countries. If our agents in South America can say, "We sell to Germany, to England, to every country in Europe," it will be a "card" such as no advertising in journal or circular could ever equal. One of the leading manufacturers of this city, in a letter to me from New York, uses these words:

> The progress here (in the United States) is remarkable. It will not be long before American manufacturers will make hosiery equal to, if not better than, our best. Some that I have seen here surpasses my own samples, price for price. They could export to Germany and the Continent to-day, were it possible to get agents to handle their cheap lines and push them.

All this indicates an industrial activity and growth surpassed by no other country.

J. C MONAGHAN,

CHEMNITZ, *September 24, 1898.* *Consul.*

---

*See CONSULAR REPORTS No 211, (April, 1898), p. 490; No. 212 (May, 1898), p. 133; No. 215 (August, 1898), p. 609.

HIGH PRICES AND INCREASED MEAT IMPORTS IN GERMANY.

The great increase in the price of meat that has taken place this year in Germany has produced a powerful agitation against the high duties and numerous restrictions, by which the Government has nearly stopped the importation of live animals and greatly increased the price of meat products.

The increase in the price of meat has been such that there has been a decided decrease in the amount consumed. As an example may be cited the report from the Berlin slaughterhouses, according to which they received 50,491 fewer animals in the year ending March 31, 1898, than in the corresponding previous year. The marked rise in the prices of meat has only taken place since March 31, so that it is probable that there has been a still greater decrease in the supply of fresh meat.

In spite of the high price of meat, the difficulties in importing live stock are so great that the steady decrease in the amount imported has not been checked during the first seven months of the year, as will be seen by the following statistics:

Animals imported into Germany during the past three years.

Year.	Oxen.	Cows.	Calves.	Pigs.	Sheep.
1895	58,904	113,712	103,709	347,814	2,092
1896	51,553	82,882	75,536	111,532	1,591
1897	51,282	73,778	86,520	91,880	1,988

Animals imported the first seven months of the years 1897 and 1898.

Seven months.	Oxen.	Cows.	Calves.	Pigs.	Sheep.
1897	30,504	35,973	52,043	52,252	1,985
1898	28,317	31,182	46,059	42,222	1,096

As a result of the high price of fresh meat, there has been a marked increase in the amount of cured meat imported. This is peculiarly advantageous to the United States, which can export meat products to Germany far more readily than live stock; and our country gets a large part of this trade.

The total imports of fresh and cured meats into Germany during the first seven months of 1897 and 1898, respectively, are shown

by the following comparative table, the statistics in which are given in metric centners of 220.4 pounds each:

Seven months	Pork.		Beef.		Bacon.	Sausage.	Ham.
	Fresh.	Cured.	Fresh.	Cured.			
1897	39,555	21,549	18,423	11,436	71,393	7,609	18,598
1898	76,588	48,988	68,810	10,903	159,483	23,241	33,699

The amount of meat imported from the United States during the same period was as follows:

Seven months.	Pork.		Beef (cured).	Hams.	Bacon.	Sausage.
	Fresh.	Cured.				
1897	6,028	8,040	9,326	14,758	64,199	3,502
1898	12,084	35,615	7,793	27,558	150,318	17,738

According to official statistics, the wholesale prices of meat on the Frankfort market during the month of September were as follows, per 100 German pounds (110 pounds avoirdupois):

Beef:	
Ox	$14.76 to $16.66
Bull	11.90 to 13.33
Cow, heifer, and steer	7.85 to 15.23
Veal	13.33 to 18.00
Mutton	11.90 to 15.23
Pork	15.47 to 15.71

DEAN B. MASON,
Vice and Deputy Consul-General.

FRANKFORT, *September 24, 1898.*

AMERICAN APPLES AND THE GERMAN FRUIT MARKET.

Partly as a result of the mild, open weather of last winter, which left uninjured by frost the larvæ of an unusual number of worms and insects, which have since hatched and inflicted serious damage upon orchards and vineyards, and partly in consequence of the cold, persistent rains which prevailed during the season of blossoming, the apple crop throughout Germany, except in southern Baden and a portion of Wurttemberg, is one of the smallest in quantity and poorest in quality that has been gathered in recent years.

As a consequence, prices, both of fall and winter apples, are un-

usually high; and even cider apples, the raw material of that important German product "Aepfelwein," which in good seasons are plentiful at from $1 to $1.25 per 100 kilograms (220 pounds), this year command three times the usual price, and are so scarce that the Aepfelwein product of Germany this season will be confined mainly to the kingdom of Wurttemberg.

At a recent special wholesale fruit market held in Frankfort, buyers were present in great force; but sellers were few, and the stock on exhibition or offered by sample for future delivery was meager in quantity, of indifferent quality, and exorbitant in price. The official record of sales on this occasion shows that fall apples in wholesale lots ranged from 20 to 30 marks ($4.76 to $7.14) per centner of 50 kilograms (110 pounds avoirdupois), while favorite winter varieties, like the "Bellefleur," were bid up for future delivery as high as 35 marks ($8.33) per 50 kilograms, which is about four-fifths of an American barrel. Meanwhile, even cooking apples of the most ordinary and inferior grade now retail in the Frankfort markets and fruit stores for 8 to 9 cents per pound.

All reports indicate that this deficiency of supply is not confined to Germany, but extends more or less generally to France, the Tyrol, Bohemia, and northern Italy, from which countries German importers had been accustomed to draw their supplies until the memorable season of 1896–97, when the American apple, impelled by the phenomenal crop and low prices of that year, invaded the Fatherland and established new standards of quality and cost in the German fruit markets.

So far as concerns shortness of local supply and attractively high prices, the conditions are therefore favorable for a large importation of American fruit this season. Whether this will be practicable, however, will depend mainly upon two factors—the supply and consequent prices of merchantable apples in the United States, and, secondly, the spirit in which the German officials enforce the decree which so suddenly, in February last, established rigid inspections of all fresh American fruits at the German frontier as a precaution against the introduction of the San José scale.

In respect to the first of these points, the outlook does not seem especially promising. So far as is known here or can be inferred from American market quotations, the apple crop, especially in the Atlantic States, is quite below the average, and even the fruit harvest on the Pacific coast is generally disappointing. In the great apple-growing States of the middle West, the prospect seems to be more favorable, though the sharp advance in the prices of all dried fruits since July would indicate that the general yield is deficient and that winter apples will continue to command high prices, though

probably not to such an extent as to prevent exports to Germany, provided the conditions of entry here are not made too difficult.

Inspections of incoming fruit from the United States are made, under existing regulations, at the frontier, remote from Frankfort, so that exact information as to the workings of the system is not easy to obtain; but from all that can be ascertained, the effect of the new regulations has been to practically suspend the previously large import of fresh American fruits that came by way of Rotterdam and the Rhine and to concentrate what remains of the trade at Hamburg, where the examinations are made under the most favorable conditions which are permitted by the decree. Fruit importations by way of the Rhine involved the stoppage and landing of the goods, especially for inspection, at the frontier station of Emmerich, where they had then to be reloaded for shipment up the river—a proceeding which involved delays and expenses that were fatal to the trade, and, as above indicated, drove what was left of it to Hamburg, a large, liberal port with a free zone, from which reshipments can be freely made to the Netherlands and other European countries.

Under the system of inspection as applied to fresh American fruits arriving at the German frontier, the chief inspector is empowered to decide in each case how many packages in each separate consignment shall be opened and inspected. He then designates a subordinate to conduct the examination, for whose services there is charged a fee of 4 marks (95 cents) for the first hour and 2 marks (47 cents) for each subsequent hour or fraction of an hour up to 12 marks ($2.85), which is the maximum fee for the inspection of one consignment. As consignments of American apples ordinarily range from fifty to several hundred barrels, it is evident that the mere inspection fee is not in itself exorbitant; but the principal obstacle imposed by the existing system is the delay and expense incident to landing the goods at the frontier station—as at Emmerich-on-Rhine—and reshipping them, after inspection, by another steamer. An effort will be made this fall by several merchants of Düsseldorf and Cologne to secure such modifications of the existing practice in respect to the compulsory landing of the whole of each consignment as will permit the resumption of direct fruit importations by way of Rotterdam and the river.

But it is probable that with all concessions that are likely to be made under the present system, German trade in fresh fruits from a source so remote as the United States will continue to be somewhat risky and uncertain. Fruit dealers here, while freely conceding the superior tenderness, flavor, and cheapness of American apples, say that the profits of handling them are meager and uncertain, always liable to be swallowed up by losses incident to rotting

and deterioration of the fruit during the long voyage. This uncertainty must continue until American shippers will take the trouble to pack and prepare apples specially for export, as is done in the Tyrol and France, in ventilated barrels lined with paper and wood wool, in which the apples, first carefully selected and wiped dry, are laid by hand to avoid danger of contusion. Hitherto, the apples imported from our country have been those which have been barreled for the home trade, and while some shipments have been received in good condition, others have required opening and picking over, with a loss of 20 to 40 per cent before the remaining sound ones could be offered for sale.

In view of all essential conditions, it would seem probable that the future development of the fruit trade between the United States and Germany will be more in the direction of dried and otherwise preserved, than of fresh, fruits. Just as the restriction of imports of live cattle and swine from neighboring countries has resulted in an increased demand in Germany for cured meats, in the production of which our country is preeminent, so the difficulties, natural and artificial, which obstruct and complicate the importation of fresh fruits, have increased the popularity and use of American evaporated and otherwise preserved apples, apricots, pears, peaches, and prunes, which have now acquired a hold upon popular appreciation here which nothing can dislodge. Of the 141,372 metric tons of fresh fruits which were imported to Germany in 1897, the United States supplied only 10,336 tons, a little more than 7 per cent; while of the 49,122 tons of dried and preserved fruits imported during the same period, our country supplied 17,850 tons, or more than 36 per cent of the whole. This does not take into account the imports of canned fruits, which, although burdened with an excessive import duty and therefore costly and comparatively little known, have a definite and growing importance.

The German trade in American dried apples, apricots, peaches, pears, and prunes is now firmly established, and it may be after all commercially wiser and more scientific to place less reliance on the export of cheap, perishable, and officially discredited freight like fresh fruits, and devote more care and energy to the sale abroad of the more condensed and valuable products that may be derived from the same fruits when in a preserved and really merchantable condition.

American evaporated apples are generally sold to German importers free on board—that is, with freight, insurance, and all charges paid to Rotterdam, Hamburg, or Bremen. The lowest price ever reached was 35 marks ($8.33) per 100 kilograms (220.46 pounds)—in the spring of 1897. Similar apples cost in July this year 65 marks

($15.47) and advanced to 80 marks ($19.04), but have since declined to about 72 marks, or $17 13, per 100 kilograms, which would be a high and risky figure if it were not offset by the scarcity and relatively still higher prices of fresh apples in Europe.

Dried California apricots have attained great favor in this country, and now cost c. i. f. at Rotterdam $26 to $28.50 per 100 kilograms, against $16.50 to $19 at this time last year, the marked advance being due to a short crop at home. American prunes have also been successfully introduced, and some large shipments were received last year. This season, however, the estimated crop of 100,000,000 pounds has shrunk to 80,000,000, among which is included a large percentage of small fruit, which can not be readily sold in European markets, for the reason that both France and Turkey have good crops of prunes this year

FRANK H. MASON,

FRANKFORT, *September 29, 1898.* *Consul-General.*

FRUIT MARKET IN MANITOBA

The fruit growers of the United States (chiefly those of the Pacific slope) supply at least four-fifths of all the green fruit consumed in Manitoba and the Northwest Territory of Canada; but there is danger that this practical monopoly of the market may not be maintained in the future. Owing to the excellence of their product and the great care they have exercised in its selection and packing for shipment, our fruit farmers have been able heretofore to defy the competition of Canadian producers, notwithstanding the fact that the latter have much the advantage in shorter lines of transportation. Now, Canadians seem to be waking up to the situation and are bringing urgent pressure to bear upon the Dominion and provincial boards of agriculture to induce them to assist in providing better facilities for preserving, packing, and transporting Canadian fruits. These bodies have heretofore bent all their energies toward securing the English and other European markets, but are now making a vigorous effort to capture the home trade. Encouragement is being given to the erection of cold-storage plants and packing houses, and transportation lines are being worked. The United States system of packing fruits has been adopted, and, altogether, a much stronger bid will be made for these markets than heretofore.

Still greater care in selecting, packing, and shipping will be necessary on the part of American fruit growers, if they would continue to hold their supremacy in this market.

W. H. H. GRAHAM,

WINNIPEG, *September 26, 1898.* *Consul.*

PULP AND PAPER MILL IN ONTARIO.

I inclose herewith a clipping taken from the Toronto Globe of October 7, 1898. Sturgeon Falls has a population of about 800 and is located on the Canadian Pacific Railroad, 387 miles west of Montreal, about 60 miles north or northeast of Georgian Bay, and 4 miles from Lake Nipissing. There is no outlet for the product of the mills by water. The water-power facilities are ample for even a much larger plant than is spoken of in the article.

Lake Nipissing is about 35 miles long by 4 to 12 miles wide, and is navigable for small boats and tugs for towing. For a supply of spruce, they will have the territory tributary to the Sturgeon River; also the Little Sturgeon, Veuve, South, and other small rivers running into Lake Nipissing. This large territory contains a vast amount of spruce timber, and the location is conceded to be an admirable one for pulp and paper making.

GEO. W. SHOTTS,
Commercial Agent.

SAULT STE. MARIE, *October 10, 1898.*

An important agreement, which secures for Ontario the investment of a vast amount of British capital, was arrived at yesterday between the Ontario government and the Sturgeon Falls Pulp Company (Limited), after more than six months of careful consideration by the crown lands department. Not only will it secure the investment of the capital aforesaid, but it will make Canada a mighty competitor in the British market with the American paper exporters, and will, at the same time, give employment to a large number of Canadians. The syndicate, the Occidental, is composed of some of the foremost British capitalists, who have secured from the government 75 square miles of spruce lands along the Sturgeon River.

At the present time, it costs American exporters between $6 and $7 a cord to lay Canadian pulp wood down at their mills, and even at this figure they can manufacture paper and sell it in England to the extent of hundreds of thousands of pounds annually. Thanks to the concession, it will not cost the Sturgeon Falls Pulp Company more than $2 per cord, and it hopes, by careful management, to become a powerful competitor for the British trade. It expects to be aided considerably by the pro-Canadian feeling in England and by the fact that it is British capital which is invested and Canadian workmen, not American, who will reap the benefit. The terms provide that all the spruce cut must be manufactured in the country. The company contracts to expend $1,000,000 in buildings and plant, and will have an operating capital of $2,500,000. The pulp mill was formally opened at Sturgeon Falls on Saturday last, and the foundation of the first of six paper mills has been laid. The company undertakes to employ not less than 240 hands, but will in reality employ nearly 400. The yearly output will be 360,000 tons of pulp, or 120 tons for every working-day.

MINES IN ONTARIO.

The seventh report of the bureau of mines gives the following statistics as to the metalliferous mines and works of the Province for the six months ended June 30, 1898, as compared with the twelve months of 1897:

Quantity.

Description.	1898 (6 months).	1897.
Gold:		
Ore treated.....net tons...	24,799½	27,589
Gold product.....ounces...	8,217½	11,412
Silver:		
Ore treated.....net tons...	73	None.
Silver product.....ounces...	19,207	None.
Nickel and copper:		
Ore smelted.....net tons...	55,871	96,094
Matte product.....do.....	9,779	14,034
Nickel in matte.....do.....	1,226	1,999
Copper in matte.....do.....	2,234	2,750
Iron ore.....do	13,032½	2,763
Pig iron:		
Ontario ores.....do.....	9,215	2,770
Foreign ores.....do.....	29,565	34,722
Mill cinder.....do.....	4,696	5,350
Pig-iron product .....do.....	25,423	24,011

Value.

Description.	1898 (6 months).	1897.
Gold	$133,744	$190,244
Silver	10,632	None.
Nickel.....	225,763	359,651
Iron ore.....	23,845	4,689
Pig iron.....	305,083	288,128
Total	840,811	1,042,779

GEO. W. SHOTTS,
Commercial Agent.

SAULT STE. MARIE, *September 26, 1898.*

CONDITIONS IN DAWSON CITY.

Dawson City has made rapid strides, during the past month, in the way of building improvements. In July, only two large warehouses were here. Four more are now nearing completion, all operating their own steamers.

There will be no lack of provisions and merchandise here this winter. The large amount of supplies being brought in has had a tendency to reduce prices on a few commodities. A 50-pound sack of flour which brought $8 last month is now sold for $5. It is to be hoped the price of hotel accommodations will be reduced, as none but the wealthy can enjoy hotel life at present, at $6.50 per night for a room with a mixture of husks and straw for a bed, a candle for light, and board at the rate of $12 per day. There are a few cheaper houses, but accommodations are still poorer. The number of log cabins is being increased rapidly, for in a couple of weeks it will be too cold to sleep in tents. Log cabins can be rented for $50 per month and upward, according to location and distance from the center of the town. Typhoid fever has been on the increase lately, and many deaths have resulted. It will decrease as soon as the ground is frozen, about the 1st of October.

Hundreds of Americans have gone down the river to Alaskan territory, where it is predicted more gold will be found than in the Northwest Territory. Forty-mile Creek, which empties into the Yukon River 52 miles below Dawson City, is understood to be very good on the Alaskan side. Eagle City, 50 miles below, is said to be in a position to rival Dawson City in another year; and as a base of supplies it will be much more convenient, being inside the boundary line. Eagle City is the name now given to what is marked Belle Isle on the map of the United States Coast and Geodetic Survey of the Yukon River. The territory for hundreds of miles around Eagle City is said to be very rich.

The future of Dawson City greatly depends on new discoveries being made this coming winter. There is no doubt of a great deal of gold being in this district within 100 miles radius, but it has yet to be prospected. The cost of taking food up to the mining camps and the price of labor make it very expensive to work the claims, and they must be very good in order to pay.

J. C. McCook,

Dawson City, *August 31, 1898.* *Consul.*

NUTS AS FOOD IN FOREIGN COUNTRIES.*

FRANCE.

CHESTNUTS.

The absence of indian corn as an article of diet among the poorer classes in France is, to a certain extent, replaced by the popular chestnut. Throughout the center of this country, from the Bay of Biscay to Switzerland, there are large plantations, and almost forests, of chestnut trees. These nuts differ very much from the ordinary species indigenous to the United States; they are broad, large, and resemble the American horse-chestnut or buckeye (*Æsculus hippocastanum*), and are extensively eaten by human beings and animals. Great care is taken in harvesting this nut before the severe frosts touch it, as freezing hastens fermentation.

The poor people, during the fall and winter, often make two meals daily from chestnuts. The ordinary way of cooking them is to remove the outside shell, blanch them,† then a wet cloth is placed in an earthen pot, which is almost filled with raw chestnuts; they are covered with a second wet cloth and put on the fire to steam; they are eaten with salt or milk. Hot steamed chestnuts are carried around the city streets in baskets or pails; the majority of the working people, who usually have no fire early in the morning, eat them for their first breakfast, with or without milk. Physicians state that, as an article of food, chestnuts are wholesome, hearty, nutritious, and fattening. These nuts are often used as a vegetable and are exceedingly popular, being found on the table of the well-to-do and wealthy. They are served not only boiled, but roasted, steamed, puréed, and as dressing for poultry and meats.

Chestnuts are made into bread by the mountain peasantry. After the nuts have been blanched, they are dried and ground. From this flour, a sweet, heavy, flat cake is made. It resembles the oaten cakes so popular among Scotch peasants. They are extensively employed for fattening animals, especially hogs. The nuts are boiled without shelling; only small, inferior fruit is thus used.

---

*The reports from Italy and Syria were prepared in answer to a request by a resident of Michigan, to whom Advance Sheets have been sent. The reports from France and Korea are printed in the same series. Other reports have been expected, and the publication of the whole has been consequently delayed.

†This is done by throwing the nuts into boiling water and with a "briguette" rubbing them around the kettle until the inside skin falls off. The briguette is composed of two square pieces of wood, 24 to 30 inches long, the angles of which are notched 1 foot up; they are joined, like shears, with a rivet.

In good seasons, chestnuts sell as low as 1 cent a pound retail, and wholesale at $1.50 per 2 cwts.

When these nuts are stored, they are very apt to heat and ferment. Great care must be taken to prevent this; they are placed in cool, airy bins, so that the air can readily pass through the pile and perfect ventilation be obtained.

WALNUTS.

This nut tree is very generally grown all over France, but more especially in the central and eastern departments. Walnuts as an article of food are losing ground in France, because of the scarcity of the product. The trees have been greatly in demand for timber and furniture making; nevertheless, there are certain sections of the country in which these nuts form a regular article of diet.

The peasants eat them with bread that has oftentimes been rubbed with garlic. The hygienic effects are considered good, replacing meat to a large extent.

These nuts are also used to make oil. It is much cheaper and similar in taste to that pressed from olives, and is employed to adulterate the latter. The prisoners, in certain prisons, are engaged in cracking walnuts and picking out the kernels, which are pressed into oil.

The prices vary very much according to the harvests. There is but little difficulty in keeping these nuts after they have been thoroughly dried.

ALMONDS.

Almonds are largely exported from France. The climate of the middle and southern departments of this Republic are most favorably adapted to the growth of this fruit. In the summer the almond, while the shell and husk are soft, green, and tender, is sold by the dozen or hundred in the markets, at from 1 to 5 cents per dozen, according to the condition of the crop. The meat is white and creamy. As an article of food, they are not used as extensively as chestnuts and walnuts.

Almond oil is employed for various purposes. Apricot stones are often ground with almonds to adulterate the oil. Confectioners and cake bakers consume large quantities of these nuts in making different kinds of cakes and candies.

HAZELNUTS.

These nut trees are only grown for their fruit, and, although they will flourish in nearly all the departments, the nuts are considered a luxury and are always high priced. Hazelnuts are eaten green, like almonds, in the summer, when they are sold at a more reasonable rate. The exportation from France is unimportant.

PEANUTS.

This nut, so common in the United States, is very rarely eaten roasted in France, and nearly all that enter the port of Bordeaux are imported from Spain, Italy, and Africa. The variety is small and uninviting looking and exorbitantly high, the price being about three times that asked in America. The taste for these nuts as a food is growing; it is practically certain that if the fine American varieties were put upon this market at a reasonable price, they would find a ready sale.

Many tons of peanuts are imported from the west coast of Africa, India, and Malayan Archipelago and are sold in Marseilles and other European countries; these are principally for the oil, which is extracted from them. Peanut oil is used for cooking purposes and as an adulterant and substitute for olive oil.

NUTRITIVE AND MEDICINAL QUALITIES OF NUTS.

Several physicians, in different parts of Europe, have been making experiments as to the nutritive and medicinal qualities of all kinds of nuts, and have advanced views favoring their use as food under certain conditions for special diseases. Nuts contain a special kind of salt especially adapted for lubricating or softening the muscles of the arteries. Some practitioners claim that elderly people would be benefited by a more extensive nut diet. The only evil to be overcome is that the nut meats should be thoroughly masticated, so that no hard pieces may enter the digestive organs.

WALTER T. GRIFFIN,

LIMOGES, *December 15, 1897.* *Commercial Agent.*

ITALY.

In this consular district, comprising the provinces of Catania, Syracuse, and Caltanissetta, five kinds of nuts are grown, which, although requiring different altitudes and climatic conditions, thrive because the necessary conditions exist—conditions rarely found in any other country of the same limited area. Here are the fertile slopes and foothills of Etna, where such nuts as require a colder climate grow, up to an altitude of from 2,000 to 4,300 feet, and also the rich plains and valleys, where, in a semitropic clime, in full view of Etna's snow-capped peak, one beholds the snowy blossoms of the almond tree.

ALMONDS.

Almonds rank first in importance. The average annual crop in this district is estimated at about 4,000 to 4,500 tons; that of the

entire island, about 7,500 tons per year for the last few years, excepting this year.

While yet green or soft, almonds are eaten by the well-to-do classes as dessert (the poorer can not afford them). The nuts are placed upon the table with the outside shell on, but cracked (the hard shell has a covering resembling a small, shriveled-up, unripe peach); the skin, which covers the kernel, slips off easily by a slight pressure between the thumb and forefinger. In a dry state, the consumption is much greater; but, as stated, almonds can only be considered a luxury.

FILBERTS OR HAZELNUTS.

These come next in order, grown on the lower slopes of Etna and in the provinces of Syracuse and Caltanissetta. The estimated average crop in this district is about 2,200 tons.

Filberts are mostly eaten after they have been roasted in hot ashes. In the roasted state, they are offered for sale on the streets by peasants. They take the place here of peanuts in the United States, except that they are not freshly roasted.

CHESTNUTS.

There are chestnut plantations on the slopes of Etna from about 2,000 to 4,300 feet altitude. The estimated annual production is from 80 to 100 tons. As these groves have been planted more for the use of the timber than the nuts, the latter are, with few exceptions, inferior in quality and size to the fine, large chestnuts raised in Calabria (southern part of Italy), which are called "maroni." The young trees on Etna (at least for the most part, I am told) are not grafted; they are raised from nuts, and all the suckers or sprouts are permitted to grow up, and when the largest are of sufficient size for use as lumber, they are cut off, timber being scarce and lumber nearly all imported.

Chestnuts are the only nuts that can be said to enter into the regular diet of the people, their consumption during the fall and winter season (beginning with the gathering of the nuts) being considerable. Almonds, filberts, and walnuts are more a luxury, served as dessert or with wine at social gatherings, and are sold in the streets by the fruit venders. As in the United States, they are also used by confectioners, the pistachio nuts being used almost wholly in this manner, excepting those exported.

Chestnuts are mostly eaten roasted. They are placed in a sheet-iron pan with handles on opposite sides, perforated with holes about half an inch in diameter, and put over a slow charcoal fire (in a small furnace) until the shells burst open, when they are done. During the roasting process, the nuts must be frequently shaken to prevent

them from burning. They are also much eaten in a cooked state; often prepared like a stew, with gravy. Besides being served at meals, they are, during the season, offered for sale at the fruit stands or on carts, where they are freshly roasted and sold hot, like our peanuts; a little salt added makes them more palatable.

As the fresh chestnuts do not keep for a very long time, where they are grown in large quantities, as in Calabria, they are dried until they are as hard as dried pease, then shelled, after horses have been driven over them to crack the shells. In this dry and hard state they can be shipped anywhere, which is not the case with the green or fresh chestnuts, which, when packed for any time, become heated, undergo a sweating process, and soon spoil. These dried nuts are said to be as good for cooking purposes as the fresh ones. They are also sold on the streets and eaten like peanuts.

PISTACHIOS.

These are the finest and most valuable of all. Small pistachio plantations are situated near Bronte, among the southwestern foothills of Etna, and in the province of Caltanissetta. The estimated annual production in good seasons is 45 tons, including those in considerable quantities sent to and exported from Messina.

WALNUTS.

These are also grown, but there are only a few small groves and scattered trees. The quality of the nuts is good, but the quantity inconsiderable.

EXPORTS OF NUTS.

Almonds and filberts are chiefly grown for export. The smallest portion is shipped to the United States from this district, Germany, England, France, and Austria each being much heavier purchasers; besides, considerable quantities are shipped to other Italian ports.

Value of exports from this district to the United States during the last four years.

Year.	Almonds.	Filberts.
1894	$22,813.51	$24,954.58
1895	42,526.82	13,659.91
1896	38,405.51	42,931.62
1897	55,590.21	26,346.43

The production of almonds and filberts (the almond crop was short this year) is constantly increasing; it is said to have doubled within the last ten years. There have also been additional plantations of chestnut, pistachio, and walnut trees. This may be partly

attributed to the destruction of many vineyards by the phylloxera, as well as to the fact that the growing of nuts has been found profitable.

NUT TREES IN THE UNITED STATES.

We have in our vast area the various soils and the different climatic conditions necessary to produce all kinds of nuts. In southern California, southern Texas, southern Louisiana, southern Mississippi, southern Alabama, southern Georgia, and Florida, almonds ought to grow as well in the United States as in Sicily. In nearly all the Northern and Central States filberts and chestnuts, and doubtless in many localities pistachio nuts (which bring such high prices) might be successfully grown. I should think it would be of great interest to our farmers to seriously study this question, and devote some of their time and land to planting groves of such nut-bearing trees or shrubs as their location would justify.

PRICES.

Almonds (sweet) shelled, medium quality, $15.50 per sack of 112 pounds. Prices vary according to size, quality, etc.

Filberts, $4.13 per sack of 112 pounds.

Chestnuts, green, $2.40 to $2.70 per 220.46 pounds; dried, $4.44 to $4.63 per 220.46 pounds.

Pistachio nuts are packed in wooden cases containing about 50 kilograms (110.23 pounds). Like almonds, they vary much in size and quality, and are assorted by hand, the choicest selling as high as $1.20 and the second grade for about 97 cents per kilogram (2.2046 pounds).

Of walnuts, probably not more than about 5 tons (for the entire district) enter into the market in quantities for export, the most of them being consumed at home. They are sold by the peasants, on the streets, at retail, seven to ten for about 1 cent; in larger lots they are sold at from 74 to 93 cents per tamolo (a Sicilian measure, equivalent to about 18 to 20 pounds), according to the more or less green state of the nuts.

The chestnuts produced in this district on the slopes of Etna are not fit for export. The trees not having been grafted, the nuts have a harsh taste, are small, and do not sell as readily as those of Calabria. The wholesale price is $1.85 to $2.04 per 220 pounds. Great quantities of the so-called maroni (fine, large nuts, grown in Calabria) are brought here by boats and exported to near-by countries. I have been told that if these maroni were spread out on the warehouse floors and daily shoveled until they become somewhat dried, they could be safely exported to the United States. Prices, as stated, are $2.40 to $2.78 per 220 pounds.

DEALERS IN NUTS.

The leading firms who handle the various nuts in Catania are:

Almonds and filberts.—Jacob Ritter, Alonzo & Consoli, Teofilo Cardillo.

Chestnuts and walnuts.—Fratelli Mangano, late Matteo & Domenico di Mauro.

Pistachio nuts.—Teofilo Cardillo.

PINE NUTS.

Besides the five kinds of nuts referred to, another is sold on the streets by the fruit venders—the pine nut. . As the name indicates, it grows upon a certain species of pine trees. The conical-shaped fruit closely resembles the pineapple. The shell is hard, heavy, and contains considerable resin, which oozes out when the nut is placed upon a coal fire, which is done to cause the cells to open, when the kernels, two in each cell, can be easily taken out. These kernels resemble in form and size, as well as in flavor, the pistachio nut; but, instead of having the greenish color of the latter (which is used by confectioners as harmless coloring matter), the pine-nut kernels, after the thin skin has been removed, are of a creamish whiteness and oily. They take the place here which peanuts have in the United States, and are much used by candy makers. In this consular district they do not grow as plentifully as in the province of Messina. The retail price is 1 cent each.

CULTIVATION OF ALMONDS.

I take from the Agricoltore Calabro Siculo, of November 15 last, the following:

The almond must be considered a plant provided by Providence for the southern provinces in general, and for Sicily especially, vegetating well even in the crevices of the rocks, resisting the drought, requiring little culture, and furnishing a product very remunerative.

The propagation mostly practiced and most convenient is that by seed. The plants are afterwards grafted with the variety preferred.

The planting of seeds can be done in nurseries, or in the permanent places; the latter way is preferred, for the reasons that the young trees may suffer by transplanting, and the seed planted to remain permanently furnishes the most robust plants.

Ordinarily, when almond orchards are set out, the plants are bought from tree peddlers, either grafted or not, and the results are not always satisfactory, because the tree venders make their nurseries in very fresh land, and the young trees produced in such ground will never be able to develop properly in arid soil. It would be better to establish the nursery in the same soil where the almond trees must be planted, as, while the plants will suffer somewhat from transplanting, they will find in the soil and the climate the identical conditions which they had in the nursery.

In planting the seeds to remain permanently, a distance of 7 to 8 meters (22.8 to 26.25 feet) should be allowed, with the rows in the form of rhombs.

In the designated places, holes or ditches are to be dug, and in each one are placed three almonds, at a depth of 10 centimeters (3.9 inches), seeds turned upward. After the plants have sprung up, the ground is cleaned of weeds, and before the end of the first year, of the three young trees which have shot up two are destroyed and only one, the most robust, saved. This is secured by a small stake and inclosed with thorns or other protection. When trees are three years old, they can be grafted. The best period for planting the seed is in the spring, although it can also be done in the fall. For seeds bitter almonds are preferred, experience having demonstrated that they furnish the plants most robust and which best resist cold spells.

CULTIVATION OF FILBERTS.

Filbert plantations exist upon a large scale near Piazza Armerina and Aidone, in the province of Caltanissetta, and Palagonia, province of Syracuse, at an elevation of from 1,968 to 2,625 feet above the sea. They are also cultivated in large quantities in the regions of Etna, in the valleys between Linguaglossa and Cartiglione, Randazzo and Bronte. In these localities the filberts are the rivals of the grapes in commercial importance.

A correspondent writes from Aidone, in the Agricoltore Calabro Siculo, concerning the culture of filberts, as follows:

The soil in this section is sandy, belonging to the third epoch, and precisely to the Eocene, judging from the presence of fossil shells. The bank of silicious sand with subtile calcareous-conchiferous strata reaches several meters in depth, except in certain spots where at little depth the clay is struck. In these particular places it is seen that the filbert plant is stunted, and dies a few years after planting.

We distinguish two species of filberts, the "sarvagiola" or "noceiolo selvaggio" (wild) and the "domestic." The first variety is more valuable, because the crop is late; the fruit is more firm and matures in the latter part of September, while the second—the domestic—matures quickly, depending upon the condition of the season. The fruit of the domestic is round and large; that of the sarvagiola, however, is cylindrical and smaller.

Among the filberts of the Mediterranean regions are the celebrated nuts of Trebizond (Asiatic Turkey), along the Black Sea shore, of much commercial importance. Three varieties are cultivated about Trebizond—the round, the oblong, and the oval, shaped like an almond. This last variety is sold at very high prices, not only in the home, but also in the European markets, where they are sold without shell and without pellicle, in order to weigh less. So shelled, when destined for European exportation, the nuts are colored with yarrow plant to meet public taste.

As stated, the production of filberts about Trebizond is enormous, amounting in 1896 to 17,472,000 kilograms (38,518,771 pounds) of nuts, viz: Trebizond, 2,800,000 kilograms (6,172,600 pounds); Terrassonde, 10,080,000 kilograms (22,222,568 pounds); Lazistan, 1,680,000 kilograms (3,703,728 pounds); Eleyus, 1,120,000 kilograms; and Tiretolio, 1,792,000 kilograms. The greater part of the nuts are exported to Marseilles, Trieste, and Italy.

The plants—which are made to grow as bushes, forming groupletts consisting of about ten shrubs, well cultivated—thrive in deep,

fresh ground, tending to clay, possibly irrigated when not endowed with natural freshness. A position not exposed to cold winds is to be preferred.

The land selected for the culture of filberts may be broken up partially or entirely, according to the means at disposal. After having laid out the ground and marked off the places where the bushes are to stand, the groups 16 to 25 feet apart (when too close together, they are deprived of air and light, and the production is minimum), a circle of about 4 feet is marked around the stake and dug out to the depth of 16 inches around the circumference, gradually inclining toward the center, where the hard ground is reached. About 8 inches apart, within this periphery, eight to ten slips of some 32 inches in length are planted, so as to leave about two or three buds above the earth. The hole is now refilled with fine earth, stratified with fermented stable manure. A number of suckers will sprout from some slips; others will yield none.

The proper season for planting is, after the first rainfall, from November to December. The sprigs for reproduction are derived from the mother bushes. Filberts can be produced from the seeds, but this is never done, because the plant produced from seed not only would require much more time to bear fruit, but would naturally grow wild and afterwards would have to be grafted, and therefore the suckers (shoots or sprouts) are preferred.

Cereals—barley, rye, or wheat—are sown in the filbert plantations during the first years; afterwards vegetables are cultivated therein.

The first manuring is done (as already stated) when the sprigs are planted; afterwards every three years.

The annual cultivation consists of a thorough digging in January, well around the roots, and a second superficial one in July. The purpose of the superficial digging is essentially to clean the soil of the weeds, which when chopped down work into the soil and help to retain the moisture. During this operation, care should be taken not to destroy the cavities.

During the first two years the plant does not bear fruit, but commences the third year. Any blossoms appearing before this time should be removed, otherwise the young bush would suffer. According to the seasons, the roots should be bared and recovered.

The pruning is done when the leaves are falling, and consists of cutting the offshoots, sprigs which are too long, and the old and dried branches; the latter are replaced by young sprouts, and in this manner the plantations can be revived indefinitely; in fact, there are plantations fifty to one hundred years old.

Irrigation takes place from June to August, once a week. Gath-

ering time is from the end of August to the middle of September, according to the season.

The filberts are not subject to serious diseases, but hail storms and cold winds cause the greatest damage.

LOUIS H. BRÜHL,

CATANIA, *December 4, 1897.* *Consul.*

KOREA.

Having been asked by certain persons in the United States for information as to the use of nuts for food, I have the honor to send a report on the subject.

Nuts are used quite extensively as food in this country. By far the most common food nut is the chestnut, which almost takes the place with Koreans which the potato occupies with us. The chestnut is used raw, boiled, roasted, cooked with meat, made into confections, powdered and mixed with candy, and dried whole, in which latter condition it becomes quite sweet, but is apt to be affected by worms. The chestnut grown in Korea is the large, coarse variety common in Italy. It is raised in large quantities, in spite of the ravages of the borer, and is so common that during the winter venders of boiled or roasted chestnuts are numerous along the streets. Boys roast the nuts in little excavations in the street and sell the hot nuts to the passers-by.

The English walnut is also grown to a large extent, and is used for food as a delicacy, as it is with us, except that it is used much more generally and forms more of a regular article of diet.

The pine nut, or pifion, is also used in very large quantities, being for sale in most of the shops. As a rule, it is used in its raw state or combined with a candy made from rice. It is mixed with other food to impart a delicate flavor, and always forms a part of the summer drink of sweetened water, to which a little wine and this nut are added. The pine nut is very rich in oil and is supposed to be strengthening, for which reason it, as well as the chestnut, is given to children of weakly condition. It seems to be difficult of digestion, however, and probably does more harm than good when taken in quantities by persons of weak digestive powers.

Peanuts are grown and are very much liked, but the native peanut is so poor and small that it is hardly worth raising. Considerable quantities of good-sized peanuts are imported of late by the Chinese, and are much in demand. No proper method of roasting this nut is at hand, and, as the Koreans use no stoves, cooking their food in kettles over a fireplace so arranged in an outer room that the

smoke and heat pass through flues under the stone floors and thus warm the living rooms, this absence of a suitable appliance for roasting or baking prevents the proper preparation of the peanut for food.

The nut next common is one that resembles in appearance our beechnut, having a white shell. It is called "uhn hang," which is translated in the dictionaries as *Salisburia adiantifolia*, or gingko nut. This is roasted and used for food, and is also used very largely in its raw condition as a remedy for coughs.

HORACE N. ALLEN,
SEOUL, *February 9, 1898.* *Consul-General.*

SYRIA.

There are seven kinds of nuts grown in this country, but each is mainly confined to its special district, viz: (1) Common filberts, grown at Anatolia and Armenia; (2) chestnuts, in Asia Minor and Armenia; (3) pine nuts, all over the pine regions; (4) pistachio nuts, northern Syria; (5) Damascus pistachio nuts, southern Syria; (6) walnuts, of the variety known in America as English walnuts; (7) gallnuts, all over the pine regions.

Filberts and chestnuts are grown mostly on the Black Sea shore, somewhat to southward. I regret I can not give an estimate of the quantity raised there annually. The chief export port is Smyrna, where they have a market value of about 4 piasters (14 cents) per oke (2¾ pounds).

Pistachios grow, as stated, in Syria, the common variety being mainly confined to the Aleppo Vilayet, and the Damascus pistachio to the province of that name. They are shipped to all parts of the country and exported from Alexandretta and Beirut.

The walnut is a common fruit all over the land.

Gallnuts are not used for food, but are exported for use in tanning hides.

The people do not regard nuts as a regular diet, but the orthodox Armenians, during their fasts, mostly in spring, prepare a dish with boiled wheat (boolghoor) and crushed walnuts. Nuts also enter in small quantities into the composition of several native dishes that are in common use. They are also much used by foreigners residing in the country in the form of pilaff (the national dish), in which nuts are mixed with rice, and in a mixture of meat and vegetables with walnuts or pistachios.

The pistachios and Damascus nuts are roasted and salted and hawked about the streets of practically every town of the Empire, and they enter largely into native candies.

Therefore, nuts in this country may be classed generally as a luxury, for use as a dessert, and for consumption by the natives at night, just before going to bed.

During the fasting time referred to, the poorer classes crush the walnuts, and mix them with boolghoor (grain boiled, dried, and ground to a coarse powder). By this method cooking is not necessary. They also work up the boolghoor by hand, with a very small quantity of water, until the particles adhere and form masses as large as a tennis ball. The centers of these are scooped out and filled with walnuts or pistachios, which are then covered over and the whole placed in boiling water for a few minutes. This produces a sustaining food.

Pistachios are raised in this consular district. They are shipped to the other parts of the country and also exported. The demand is not great, the average export from the port of Alexandretta being only about 130,000 kilograms (286,489 pounds). The kilogram (2.2046 pounds) is worth from 44 to 57 cents gold.

The exportation of gallnuts during the past year amounted to $201,907, of which the greater portion (about $155,000) went to France; $2,700 worth went to the United States.

HORACE LEE WASHINGTON,
ALEXANDRETTA, *December 15, 1897.* *Consul.*

DECORTICATION OF PEPPER.

In reply to the inquiry of a Baltimore correspondent, a Department instruction was sent under date of July 5, 1898, to the consular officers of London, Amsterdam, Batavia, and Singapore, requesting information as to the hulling of pepper. The replies (Advance Sheets of which have been sent the correspondent) are given below.

ENGLAND.

Consul-General Osborne writes from London, July 21, 1898:

I have made inquiries through Messrs. W. H. Cole & Co., a large and well-known firm of colonial brokers in this city, and append herewith the information given by them on the subject:

Pepper shells and their attending dust, etc., are the so-called "refuse" arising from the turning of the natural black-pepper berry into white pepper, and this is effected by various methods, such as soaking, liming, and by machinery, both in the Eastern markets of production and after shipment thence.

The so-called "Singapore" white, as shipped from that port, is made from the fully ripened black berries as cultivated in the neighboring islands, and the hull is removed in Singapore by hand and friction before the berries are fully dried. So-called "Penang" white, as shipped from there, is made from black berries really grown in Sumatra, but imported into the Island of Penang in a dried condition.

There the berries are soaked in lime and water for some weeks, until the hull is soft, when it is removed by rubbing and washing, by both feet and hands, and is finally slightly coated with lime before shipment.

Siam white is manufactured on much the same lines as Singapore, and from black berries grown in Siam.

From this it will be seen a large quantity of hulls and broken berries may and do accumulate, and they are shipped from the East in considerable quantities to the consuming markets during each season, and are used for making ground black pepper, which, though darker in color, is not necessarily impure.

In Europe, a certain quantity of the finest grade of white pepper has for years been made by hulling the Singapore and Penang black peppers, shipped in a perfectly dried state, by soaking and with the aid of decorticating machinery.

It may also be desirable to point out that pepper berries left on the vines till overripe lose their hull entirely by a natural course of decay (or decortication) and become actually white pepper, which, after all, is simply the kernel of the black berry.

NETHERLANDS.

Consul Corey, of Amsterdam, under date of July 25, 1898, says:

The following information as to pepper was kindly given me by a broker:

There exist in England and in America a couple of factories where, more or less successfully, black pepper is transformed into white pepper. The process is unknown to me. Hulling, however, will be required and will take place at the port of importation, At the place of production (the Dutch colonies), the pepper shrub produces both black and white pepper. After gathering, the less ripe fruits are sold as black pepper; whereas the riper ones, after being soaked and washed, are exported separately as white pepper.

DUTCH INDIA.

The following, bearing date of Batavia, August 29, 1898, has been received from Consul Everett:

Pepper here is hulled shortly after it is picked, at the place of production; but there is absolutely no reason why it should be so. It could be done just as well in America, and probably better.

The pepper is soaked for about ten days in water; it is then taken out and trodden with bare feet until the hull separates from the seed, which it does very easily, as by that time it is soft and pulpy. American ingenuity could easily invent some less primitive way of pressing out the seed than by treading with the feet.

The pepper, when freshly picked, is red, and when hulled the seed is quite white. If kept some time, the pepper becomes black and tends to shrivel, and when hulled the seed is gray. Sometimes this gray seed is artificially polished and treated with a solution of lime, in order to make it look white, as though hulled from fresh pepper.

The sooner the pepper is treated after being picked, the easier and cleaner it is hulled; but pepper can be hulled months after picking and be none the worse. It is singular that it has never been done, and it would doubtless save American importers much expense to hull their pepper in America.

STRAITS SETTLEMENTS.

Consul-General Pratt, of Singapore, under date of August 25, 1898, writes:

The fruit grows in masses of twenty or thirty on a spike. The harvest takes place before the berries are quite ripe, on account of their greater pungency at that period. Those found ripe are set apart, to be converted into white pepper. The berries are hand picked and are detached from the stem by rubbing with the hands. They are dried by the sun or artifically on heated iron plates, and afterwards, packed in bags, are ready for market.

The hulling of the berry is performed to produce white pepper, and the fresh, ripe, or almost ripe, fruit is used for the purpose—the removal of the outer skin being the only difference between the two varieties. This is done by the planters at the place of production. The process is simple; the fresh-plucked berries are put in vats and allowed to steep in water until the outer skin becomes soft, when coolies tread them out, after which it is dried and bleached in the sun and is then ready for market.

Some years ago, a process was patented by a pepper merchant at Penang to remove the outer skin of the dried black pepper and bleach it white by means of chemicals; but, as it was found that the price obtained (say, $2 higher than that cured in the ordinary way) did not cover the extra outlay for chemicals, the practice has been discontinued.

THE CITY OF TIENTSIN.

Tientsin is situated at the junction of the Huei River (sometimes called the Grand Canal) with the Peiho River, in latitude 39° 3′ 55″ north and longitude 117° 3′ 55″ east. It is distant from Pekin by road about 80 miles. Formerly, it was a military station only, but towards the end of the seventeenth century became a city of great importance. To-day, it is the home of 1,000,000 people, with an annual import and export trade aggregating 65,000,000 taels* ($42,250,000). In former years, steamships landed their passengers and cargo

*Consul Ragsdale values the haikwan tael at 65 cents; the estimate of the United States Director of the Mint, July 1, 1898, is 68.8 cents.

at the bund in Tientsin, but for three years past the Peiho River has been unnavigable, excepting for boats of very light draft, since which time cargoes have been shifted to lighters at Tangku (mouth of the river) and thence hauled to Tientsin by tugs, a necessity that adds greatly to the cost of transportation. At one time, the volume of water flowing down the Peiho was vast; but many canals have been constructed, causing the river channel to become so shallow as to create consternation among shippers and property owners, who supplicated the consular body to devise some means for improvement. After many meetings and much consideration, it was determined to raise a fund of 250,000 taels ($162,500), to be expended in improving the water course. The viceroy assumed the responsibility of raising 100,000 taels ($65,000) and the consular body the further sum of 150,000 taels ($97,500) by means of a loan to be repaid out of a bund or landing tax, levied by authority of the French and English municipalities—a scheme approved by the diplomatic body at Pekin. The money has been secured and is now in bank, and the work of improvement will commence immediately, and, it is hoped, will be successful.

IMPROVEMENTS.

The growth of Tientsin within the past few years is most astonishing. The mud holes and swamps of a few years ago have been filled in; one, two, three, and even four story brick buildings erected; streets macadamized, trees planted, gas works constructed, and now pipes (from New York) for a very elaborate and perfect water system are being laid—all due to foreign enterprise. On the other hand, the Chinese authorities have been seized with the spirit of progress, and to them is due the building and furnishing of the Imperial Military College, the Imperial University, arsenals for the manufacture of guns and ammunition, a mint for the coinage of silver, and, last but not least, 320 miles of a splendid railway. Machinery has also been purchased for a complete woolen mill, and many other improvements are now under consideration.

THE IMPERIAL UNIVERSITY.

The university was established in 1895 by its president, Mr. C. D. Tenney (former United States vice-consul at Tientsin), at the request of His Excellency Sheng Hsuan, with the advice and approval of the Emperor. His Excellency Wu Ting-fang, present Chinese minister at Washington, and Mr. Ts-ai Shao-chin, member of Viceroy Wang's staff, were the first directors. The university is divided into three departments, viz, collegiate, preparatory, and railway. The preparatory course covers four years, after which the students enter the collegiate department, where they remain another four years. At the end of the first year in the collegiate department, the students

are drafted into special classes—civil, mining, and mechanical engineering, and law. Each special branch is in charge of foreign professors, assisted by Chinese professors. The railway department was organized for the purpose of providing men for subordinate positions in the railway service—draftsmen, engineers, station masters, etc. The students are admitted to the various departments by competitive examinations. The government of the university is solely in the hands of the president and directors, the former being responsible for the educational work of the institution. Thirty students in each class are supported by the Government and are bound to Government service after their graduation. The present number of students is 250, and the annual expenses are 60,000 taels ($39,000), entirely borne by the Government. The president and four of the five professors are citizens of the United States.

THE IMPERIAL MILITARY COLLEGE.

This college was established by His Excellency Li Hung-Chang, the viceroy of Chihli, in the year 1884. At the beginning, it was simply intended to give employment to the German officers under contract with the Government, but the necessity of training men in the arts of war led the viceroy to memorialize the Throne in behalf of a permanent military college. A suitable building was erected, at a cost of 50,000 taels ($32,500), and the annual expense of maintenance is about the same amount. The students are drafted from the different military camps, and they are supported by the generals under whom they were serving. After a two years' course, they return to their respective commands as instructors. The school is under the directorship of Taotai Yint Chang, a Manchu, who received his military education in Germany and held a commission of lieutenancy in the Austrian army. All the principal instructors are Germans, most of them being noncommissioned officers. The course of study and training is practically the same as pursued in most military institutions. The German instructors do not understand the Chinese language, and give their instructions through interpreters. Many of the graduates are now holding prominent positions in the army and civil government.

THE CHINESE MINING COMPANY.

This is a commercial joint-stock company, with headquarters at Tientsin. The shareholders are private individuals. Their mines are located at Tong Shan, about 180 miles north of Tientsin, and at Linsi. The daily output of coal is 1,500 tons at the former and 700 tons at the latter place. They employ 8,000 to 10,000 men, the native operators receiving an average of 20 cents (Mexican) per day.

The pit deputies and overseers receive $20 to $60 (Mexican) per month. There are eleven foreigners employed—one Austrian, and the remainder British subjects. Besides these, there are five Chinese, educated in the United States, two having studied at Lehigh and Lafayette Mining College. One is now chief mining engineer at Linsi, and the other technical manager of the Tong Shan colliery. A third was an undergraduate of Yale, class of 1884, where he took honors in the classics. He is now the company's chief secretary. The fourth is translator, and the fifth shipping manager and also chief secretary to the chief director. The salaries paid foreigners vary from $1,200 to $3,500 gold per annum. The company owns six steamers, which are constantly employed in transporting coal to southern ports. This company also owns and operates a silver mine in Mongolia, the machinery for which was purchased from Frayer & Chalmers, of Chicago. The machinery for the coal mines was purchased in England and Germany.

THE IMPERIAL CHINESE RAILWAY.

This railway is without doubt one of the greatest enterprises in northern China. Already, 320 miles of road have been constructed (80 miles of which are double track), and 125 are now under construction. The company has 64 engines of Chinese make, 4 Belgian, 21 American, and 38 English. From 8,000 to 12,000 men are constantly employed, 42 of whom are foreigners. They have extensive shops at Tong Shan, where cars of all kinds are built. The crossties and bridge timbers are imported, principally from Oregon, although small shipments, far inferior in quality, are received from Japan. The road is gradually being extended, and ere long will be completed to Niuchwang, one of the terminal points of the Russian Railway. The traffic for the past eleven months was as follows: Passengers carried, 1,216,885; freight, 1,870,118 tons. The traffic is rapidly increasing, and already the road is paying handsome dividends.

GOVERNMENT ARSENALS.

The Government has erected at Tientsin two arsenals for the manufacture of munitions of war of every description—shells, cartridges, torpedoes, powder, gun cotton, guns, etc. In 1896, machinery was added to one of these arsenals for the purpose of coining silver dollars, half dollars, 20, 10, and 5 cent pieces. The coinage for 1897 aggregated the sum of $1,176,555.60. The vast machinery in these arsenals was purchased in Europe, and the superintendent and assistants are English subjects. There are 2,500 men constantly employed in the two arsenals

TRADE OF TIENTSIN.

The following comparative tables will give some idea of the trade of Tientsin:

Principal articles of import.

Articles.	1896.	1897.	1898 (half year).
Shirtings:			
Gray (English).....pieces...	1,297,470	1,175,150	521,208
White (English).....do.....	604,847	525,516	264,808
Drills:			
English.....do.....	17,638	20,874	4,135
American.....do.....	447,193	554,155	132,770
Dutch.....do.....	37,470	45,830	21,235
Sheetings:			
English.....do.....	139,914	85,499	28,063
American.....do.....	1,085,977	1,260,908	634,334
Handkerchiefs (German).....dozen...	86,006	64,547	21,116
Cotton yarn:			
English.....piculs*...	12,239	8,224	8,396
Indian.....do.....	190,247	101,797	68,270
Lastings, woolen (English).....do.....	13,379	18,150	11,271
Dyes, aniline (German).....value...	$317,888	$269,451	$77,425
Matches (Austrian and Japanese).....gross...	1,411,869	1,185,027	694,630
Needles (German).....M...	1,512,950	1,212,560	246,973
Kerosene:			
American.....gallons...	2,743,200	4,560,500	1,007,000
Russian.....do.....	3,246,000	5,208,380	657,000
Lankat.....do.....	25,000	120,000	166,000
Tea, for Russia:			
Black.....piculs*...	144,943	118,009	5,718
Brick.....do.....	463,705	407,763	52,683
Green.....do.....	32,034	32,533	305
Dust.....do.....	3,790	3,748	992
Cereals.....do.....	678,528	553,206	48,429

* 1 picul=133 pounds.

Gross value of imports and exports.

Description.	1895.		1896.		1897.	
Imports:	*Hk. taels.**		*Hk. taels.**		*Hk. taels.**	
Foreign	23,382,529	$18,190,607	29,584,743	$23,963,641	30,306,701	$22,426,958
Native	26,065,475	20,278,926	21,599,781	17,495,822	23,337,466	17,269,724
Exports (native)	9,158,924	7,125,642	8,561,840	6,935,090	11,020,044	8,140,032

* The reductions to United States currency in this table are made on the basis of the estimates by the United States Director of the Mint, the average for each year being taken.

It is impossible to give the exact imports from the United States, as more than half of the goods comes through Shanghai and Hongkong importers, and on arrival here is listed as native imports. It is safe to say, however, that our trade is increasing yearly, and, if properly managed, would increase rapidly. It is unfortunate that most agents for American products are foreigners, and even when these are American, the clerks are nearly all foreigners. If our merchants would provide for sample warehouses at Hongkong, Shanghai, and Tientsin, and send good, live, and responsible Americans to manage

the same, they would be astonished at the increase in their exports. The Germans are preparing to adopt this method, and, unless checkmated, will make sad inroads on the trade we now have. They are also getting ready to publish a paper in the Chinese language, especially to advertise their products.

Again, our manufactured goods are being constantly counterfeited. Fairbank's scales, Columbia bicycles, and many other standard articles are made in Japan and shipped here for half the price of the genuine article. They are equal to our products in name only. A graphophone is made in Germany and sold here for the genuine Edison. It is, indeed, a very poor imitation.

The number and tonnage of vessels entered and cleared under each flag for the year ended December 31, 1897, is to be found in the following table:

ENTERED.

Flag.	With cargo.		In ballast.		Total.	
	No.	Tons.	No.	Tons.	No.	Tons.
Steamers.						
British	274	276,240	12	5,885	286	282,125
German	7	5,698	5	3,562	12	9,260
Swedish and Norwegian	41	37,895	6	4,745	47	42,640
Austrian	1	1,496	.....	.....	1	1,496
Japanese	40	32,533	2	1,742	42	34,275
Chinese	284	268,720	46	16,169	330	284,889
Total	647	622,582	71	32,103	718	654,685
Sailing vessels.						
British	9	4,318	3	1,051	12	5,369
American	5	3,683	.....	.....	5	3,683
Total	14	8,001	3	1,051	17	9,052
Grand total	661	630,583	74	33,154	735	663,737

CLEARED.

Steamers.						
British	229	226,688	54	55,374	283	282,062
German	7	5,434	5	3,826	12	9,260
Swedish and Norwegian	39	35,956	8	6,684	47	42,640
Austrian	.....	.....	1	1,496	1	1,496
Japanese	10	9,332	32	24,943	42	34,275
Chinese	274	230,213	56	54,676	330	284,889
Total	559	507,623	156	146,999	715	654,622
Sailing vessels.						
British	5	2,786	5	1,835	10	4,621
American	.....	.....	5	3,683	5	3,683
Total	5	2,786	10	5,518	15	8,304
Grand total	564	510,409	166	152,517	730	662,926

JAMES W. RAGSDALE,
Consul.

TIENTSIN, *July 19, 1898.*

GERMAN ACQUISITIONS IN SHANTUNG.

I inclose an extract from the Shanghai Gazette of May 30, 1898, purporting to give the terms of the treaty* between China and Germany relating to the commercial control of this province. The railway and mining concession includes practically all of the province of Shantung. I understand that Germany has also obtained the right to build a railroad to the Yangtze.

The region embraced in Paragraph IV of the articles granting the mining concession takes in the copper, gold, iron, coal, and diamond fields, and no other foreigner, and not even the natives themselves, can operate mines without Germany's consent.

From recent information, I am led to believe that the Germans are trying to stop the new concession granted to Dr. Yungwing to build his line outside of the province from Tientsin to Shanghai. I have already reported† the action of the Germans in causing the Chinese Government to withdraw its grant to Yung to build in this province. Yung's company is an American syndicate, and he steadfastly held to the point that only American capital, machinery, and mechanics would be employed by it.

JOHN FOWLER,
Consul.

CHEFOO, *August 9, 1898.*

[Extract from Shanghai Gazette of May 30, 1898.]

The following is a translation of the official memorandum of the Tsungli Yamên with reference to the settlement of the German claims in Shantung:

An amicable arrangement of the missionary troubles at Tsaichow-fu, Shantung, having been arrived at by Germany and China, the two powers immediately interested, China makes the following concessions as a mark of friendly feeling towards Germany, in the hope that the good relations existing between the two countries may always continue, that they may become more intimate, and that their mutual commerce may expand and prosper to their mutual advantage. The first concession is the leasing of Kyao-chau and adjacent territories to Germany, to which the following conditions appertain:

I.—His Majesty the Emperor of China, being desirous of preserving the existing good relations with His Majesty the Emperor of Germany and of promoting an increase of German power and influence in the Far East, sanctions the acquirement under lease by Germany of the land extending for 100 li,‡ at high tide (at Kyao-chau).

His Majesty the Emperor of China is willing that German troops should take possession of the above-mentioned territory at any time the Emperor of Germany

---

*Noted in CONSULAR REPORTS No. 212 (May, 1898), p. 140.

†See CONSULAR REPORTS No. 215 (August, 1898), p. 584.

‡100 li=33⅓ English miles.

chooses. China retains her sovereignty over this territory, and, should she at any time wish to enact laws or carry out plans within the leased area, she shall be at liberty to enter into negotiations with Germany with reference thereto; provided always that such laws or plans shall not be prejudicial to German interests. Germany may engage in works for the public benefit, such as waterworks, within the territory covered by the lease, without reference to China. Should China wish to march troops or establish garrisons therein she can only do so after negotiating with and obtaining the express permission of Germany.

II.—His Majesty the Emperor of Germany being desirous, like the rulers of certain other countries, of establishing a naval and coaling station and constructing dockyards on the coast of China, the Emperor of China agrees to lease to him for the purpose all the land on the southern and northern sides of Kyao-chau Bay for a term of ninety-nine years. Germany is to be at liberty to erect forts on this land for the defense of her possessions therein.

III.—During the continuance of the lease, China shall have no voice in the government or administration of the leased territory. It will be governed and administered during the whole term of ninety-nine years solely by Germany, so that the possibility of friction between the two powers may be reduced to the smallest magnitude. The lease covers the following districts:

(*a*) All the land in the northeast of Lienhan, adjacent to the northeastern mouth of the bay, within a straight line drawn from the northeastern corner of Yintao to Laoshan-wan.

(*b*) All the land in the southwest of Lienhan, adjacent to the southern mouth of the bay, within a straight line drawn from a point on the shore of the bay bearing southwest by south from Tsi-pe-shan.

(*c*). Tsi-pe-shan and Yintao.

(*d*) The whole area of the bay of Kyao-chau covered at high water.

(*e*) Certain islands at the entrance of the bay, which are ceded for the purpose of erecting forts for the defense of the German possessions.

The boundaries of the leased territory shall hereafter be more exactly defined by a commission appointed jointly by the Chinese and German Governments, and consisting of Chinese and German subjects. Chinese ships of war and merchant ships and ships of war and merchant ships of countries having treaties and in a state of amity with China shall receive equal treatment with German ships of war and merchant ships in Kyao-chau Bay during the continuance of the lease. Germany is at liberty to enact any regulations she desires for the government of the territory and harbor, provided such regulations apply impartially to the ships of all nations, Germany and China included.*

IV.—Germany shall be at liberty to erect whatever light-houses, beacons, and other aids to navigation she chooses within the territory leased and along the islands and coasts approaching the entrance to the harbor. Vessels of China and vessels of other countries entering the harbor shall be liable to special duties for the repair and maintenance of all light-houses, beacons, and other aids to navigation which Germany may erect and establish. Chinese vessels shall be exempt from other special duties.

V.—Should Germany desire to give up her interest in the leased territory before the expiration of ninety-nine years, China shall take over the whole area and pay Germany for whatever German property may at the time of surrender be there situated. In case of such surrender taking place, Germany shall be at liberty to lease some other point along the coast. Germany shall not cede the territory leased

* Kyao-chau was declared a free port on September 2. See CONSULAR REPORTS No. 218 (November, 1898), p. 468.

to any other power than China. Germany shall pay a reasonable price to the native proprietors for whatever lands her Government or subjects require.

The second important concession by China to Germany is the railway and mining concession, the principal provisions of which are as follows:

I.—The Chinese Government sanctions the construction by Germany of two lines of railway in Shantung. The first will run from Kyao-chau and Tsinan-fu to the boundary of Shantung province, via Wei-hsien, Tsinchow, Pashan, Tsechuen, and Suiping. The second line will connect Kyao-chau with Chinchow, whence an extension will be constructed to Tsinan through Laiwuhsien.

II.—In order to carry out the above-mentioned railway works, a Chinese-German company shall be formed, with branches at whatever places may be necessary, and in this company both German and Chinese subjects shall be at liberty to invest money, if they so choose, and appoint directors for the management of the undertaking.

III.—All arrangements in connection with the works specified shall be determined by a future conference of German and Chinese representatives. The Chinese Government shall afford every facility and protection and extend every welcome to representatives of the German Railway Company operating in Chinese territory. Profits derived from the working of these railways shall be justly divided pro rata between the shareholders without regard to nationality. The object of constructing these lines is solely the development of commerce. In inaugurating a railway system in Shantung, Germany entertains no treacherous intention toward China, and undertakes not to unlawfully seize any land in the province.

IV.—The Chinese Government shall allow German subjects to hold and develop mining property for a distance of 30 li* from each side of these railways and along the whole extent of the lines. The following places where mining operations may be carried on are particularly specified: Along the northern railway from Kyao-chau to Tsinan, Wei-hsien, Pa-shan-hsien, and various other points, and along the southern Kyao-chau–Tsinan–Chinchau line, Chinchau-fu, Laiwuhsien, etc. In trying to develop mining property in China, Germany is actuated by no treacherous motives against this country, but seeks solely to increase commerce and improve the relations between the two countries.

If at any time the Chinese should form schemes for the development of Shantung, for the execution of which it is necessary to obtain foreign capital, the Chinese Government, or whatever Chinese may be interested in such schemes, shall, in the first instance, apply to German capitalists. Application shall also be made to German manufacturers for the necessary machinery and materials before the manufacturers of any other power are approached. Should German capitalists or manufacturers decline to take up the business, the Chinese shall then be at liberty to obtain money and materials from other nations.

NEW CHINESE MINTS.

Machinery for a mint at Chengtu has just been set up and tested. It was furnished by a machine company of Bridgeton, N. J., and is of sufficient capacity to turn out 5,000 dollars and 18,000 coins smaller than the dollar per hour. It is intended to make dollars, half dollars, twenty-five cent pieces, dimes, and five-cent pieces. This company

* About 12 miles.

also supplied the machinery for a new mint for making copper cash at Wuchang. This mint, with a capacity of 36,000 cash per hour, has been in operation two weeks.

The machinery for the mint at Chengtu was delivered by the company supplying it free on board at Ichang, the head of navigation of the Yangtze River, where it was taken in charge by the Chinese authorities. Its subsequent treatment was characteristic. The machinery was in boxes, as shipped from the factory. It was left on the bank at Ichang for a month, so close to the water that when a slight flood came the boxes were under water, and the muddy water deposited sediment until the boxes were full of mud. In this condition they were taken to Chengtu, being about two months on the way. When the boxes were opened, they were found to be caked up solidly with mud, except where the rats had dug holes and made nests while the boxes lay at the arsenal. The machinery finally was gotten into condition to be put together, but the dies were so badly rusted that they would be condemned in an American mint. The Chinese, however, made no objections to the imperfect places in the coins, apparently thinking them additional safeguards against counterfeiting. Some parts of the machinery were entirely ruined and others were so badly rusted that they can not last long.

JOHN GOODNOW,
Consul-General.

SHANGHAI, *August 16, 1898.*

TRADE OF THE PHILIPPINES IN 1897.

As all details relative to the Philippine Islands are at present of importance, I have thought that the free translation of a recent report made by the Belgian consul at Manila upon the export trade of those islands during 1897 may not be without interest. This report bears date April 21, 1898.

The Belgian consul maintains that during 1897, statistics show a great increase in the export trade, notwithstanding the continuance of the rebellion. The export of abaca, or manila hemp, increased by 314,284 piculs (43,816,903 pounds). Copra likewise was exported to the amount of 200,000 piculs (27,890,000 pounds) more than in 1896. The exportation of this product began only in 1892; prior to that time almost all the copra came from the Caroline Islands. To-day, all the islands of the archipelago produce it. Exports of dyewoods, coffee, indigo, mother-of-pearl, gums, tobacco, leather, and hemp rope also considerably increased.

The following table shows the total export trade of abaca from the Philippine Islands during the past ten years:

Year.	Quantity exported.	Year.	Quantity exported.
	Pounds.		*Pounds.*
1888	184,472,548	1893	178,906,261
1889	158,374,451	1894	221,999,100
1890	141,166,629	1895	229,338,075
1891	177,254,058	1896	213,601,979
1892	220,472,681	1897	251,648,123

Exports of sugar by Manila show a decrease of 656,426 piculs (91,899,640 pounds) for 1897, as compared with 1896.

At Cëbu, on the contrary, the export trade of sugar increased. Both in the Visayos and Negros islands the production of sugar greatly developed. During the last ten years the quantity of sugar exported from the Philippine Islands has been as follows:

Year.	Quantity exported.	Year.	Quantity exported.
	Pounds.		*Pounds.*
1888	414,988,800	1893	585,801,440
1889	490,377,680	1894	435,275,120
1890	290,459,080	1895	517,267,660
1891	373,767,400	1896	515,006,520
1892	553,148,400	1897	452,687,620

The exports of dyewoods from Manila, entirely for China and Japan, amounted in 1897 to 9,167,900 pounds, as compared with 7,838,600 pounds in 1896.

The exportation of cigars fell from 194,136,000 in 1896 to 169,465,000 in 1897. The export trade of 1897 was distributed as follows:

To—	Number.	To—	Number.
United States and Canada:		England	24,290,000
Atlantic ports	2,460,000	Australia	16,300,000
Pacific ports	183,000	Singapore and India	37,310,000
Continental Europe	30,500,000	China and Japan	58,420,000

Of leather for glue, there were exported, in 1897, 112,000 pounds for the United States and Canada, 77,150 pounds for Singapore and India, and 99,450 pounds for China and Japan.

HENRY C. MORRIS,

GHENT, *September 17, 1898.* *Consul.*

SHIPBUILDING AT NAGASAKI.

There has recently been delivered to the Nippon Yusen Kaisha what is said to be the largest steamship that has ever been launched outside of American or European waters.

The vessel is the *Hitachi Maru*, built to order by the Mitsu Bishi Company in its shipbuilding yards at this port. She was about twelve months in the builders' hands, and before delivery to owners was subjected to survey by an officer sent especially from London. Her class is Lloyds' 100 A1, approved by the shipbuilding encouragement law of the Imperial Japanese Government; type, 3 decks; material of hull, steel; length, 462 feet; beam, 49 feet 2 inches; depth, 33 feet 6 inches; draft, average, 25 feet; gross tonnage, 6,150 tons; displacement, 11,660 tons; freight capacity, 7,150 tons; engines, triple-expansion, double screws; boilers, four; indicated horsepower, 3,500, speed, 14 knots.

The Mitsu Bishi Company will immediately commence the construction of a sister ship to the *Hitachi Maru* for the Nippon Yusen Kaisha.

There has also been opened at this port by the Mitsu Bishi Company a new granite dock, of an extreme length of 371 feet; length on blocks, 350 feet; breadth, 78 feet, with draft of 23 feet at high water. This dock is close to the engine works of the company, which have been largely improved by the extension of the buildings and by the addition of machines of the latest type, including a large overhead crane of 30 tons carrying power in the erecting shop and new sheer legs of 80 tons capacity on the jetty for the landing and delivery of heavy boilers and machinery. The boiler shop, with its 105-ton riveting machine and other appointments, is now equal to the heaviest kind of work. A powerful steam hammer has been added, as well as other improvements necessitated by the increasing requirements of vessels and the larger type of ships now navigating the eastern waters. Rails have been laid from the sheers to and around the works, with turntables, etc. A new molding shop of 50 tons capacity, with all the modern improvements, has been erected.

The shipbuilding yard has been laid out for vessels up to 500 feet in length, and ground enough has been added for four vessels to be on the stocks at one time. Ships of 300 to 450 feet are now being built. The molding loft, with carpenter shops underneath, has been greatly increased in size.

The No. 1 dock has been lengthened so that it can now take in vessels of the heaviest draft, up to a length of 500 feet; while the

patent slip and siding can take vessels of over 1,000 tons register. The docks will accommodate five vessels of ordinary size at one time.

The Mitsu Bishi Shipbuilding Company, when busy, employs 2,000 men; it pays laborers 60 sen a day, which is 30 cents gold; skilled workmen receiving from 1 yen (50 cents) per day upwards. This company is gradually advancing the pay of employees, for the reason that the cost of rent, fuel, clothing, and food to all classes has so increased as to render an advance necessary. The cost of living among all classes has increased enormously at this port—entirely out of proportion to the advance in wages and salaries.

CHARLES B. HARRIS,

NAGASAKI, *September 5, 1898.* *Consul.*

WHEAT FLOUR IN JAPAN.

I inclose a clipping, giving interesting information as to the condition of the trade in wheat flour in Japan.

I can not agree with the expectation expressed by the writer of the article in his last sentence, as to the future reduction in imports from the United States. From inquiry and observation here, I am led to the conviction that the reverse will occur, provided no excessive import duties are levied on our flour.

During the year 1897, the imports of this article into Japan (nearly all from the United States) showed a slight falling off in quantity, but an increase in value of $86,183, as compared with the preceding year.

JOHN F. GOWEY,

YOKOHAMA, *September 6, 1898.* *Consul-General.*

WHEATEN-FLOUR BUSINESS IN JAPAN.

[From the Japan Times, September 6, 1898.]

The flour business in this country is yet in its infant stages, and consequently there are no large mills, such as are to be found in other countries. In Tokyo, there is only one establishment of the kind, two or three in Osaka, one in Nagasaki, one in Hiroshima, while a similar one was lately established in Sapporo, Hokkaido. At the one in Tokyo, where the latest improved machinery has been employed since 1896, the output of flour per month is said to amount to 16,000 bags on an average, about 4,000 koku (19,852 bushels) of wheat being consumed every month. But the output of all the mills in the country together can not be expected to entirely meet the demand of the ever-increasing number of consumers, thus necessitating the import of flour in considerable quantity. In 1892, the flour imported, chiefly from America, amounted to 752 kin (1,002 pounds); and in 1896, the imports amounted to 24,000,000 kin (32,000,000 pounds), with a marked increasing tendency.

With regard to the quality of the home and American flour, there is some difference, the latter being perfectly white; and it is on this account that the American flour is widely consumed now in Japan. In order to remedy this state of things, some seeds of the American wheat plant have recently been introduced into Japan, and are now cultivated and successfully raised in Joshu, Ibaraki, and other neighboring localities of the capital. It is therefore expected that after the lapse of some years, the import of American flour will be greatly reduced.

JAPANESE HAT TRADE.

I inclose, as of interest to American manufacturers, a clipping from the Japan Times of August 31, 1898, relating to the hat trade in this country.

The statistics of Japanese imports show that during the year 1897 some 26,617 dozen hats, valued at $134,098.50, were brought in from all countries. Of this number, Great Britain furnished 17,321 dozen, valued at $112,375.50, and the United States 486 dozen, valued at $2,867.

JOHN F. GOWEY,
Consul-General.

YOKOHAMA, *September 1, 1898.*

Although of comparatively recent introduction, the manufacture of men's hats and caps has made rapid progress in Japan, so that the import of foreign-made goods has been sensibly reduced. It was in 1889 that the Tokyo Hat Manufacturing Company was first established, with a capital of 100,000 yen, under the management of two foreign experts, one American and the other a German. Shortly afterwards the premises were entirely destroyed by fire, and the business had to be suspended until 1892, when the company resumed work. Very soon it was able to declare a dividend of 8 per cent per annum, and it is now in a most prosperous condition. There are five establishments; one is suspending its work, but the output of the other four amounts to 40,000 dozen a year. At present, therefore, it is only the very superior kinds that are imported from abroad. The material is imported, but fair profits are being realized, and it is stated that some of the establishments have commenced export to Hongkong, Shanghai, and other ports in the East.

REVISED REGULATIONS FOR INLAND NAVIGATION IN CHINA.

Minister Conger sends from Pekin, July 31, 1898, copy of the revised inland steam navigation regulations, which were issued to take the place of those transmitted by Minister Denby under date of June 21, and which were printed in CONSULAR REPORTS No. 217 (October, 1898), p. 261. The principal points of difference are noted below:

In paragraph 1, after the declaration that the inland waters of

China are opened for steamers registered for that trade, it is stated that the steamers must confine their trade to the inland waters and must not proceed to places outside of Chinese territory. The expression "inland waters" is used with similar meaning to that given for places in the interior (wei ti) in the fourth article of the Chefoo convention.

In paragraphs 5, 6, and 7 it is added that duties paid by vessels belonging to foreign merchants, as well as the method of dealing with such vessels, must be in accordance with the treaty tariff and provisions. Unregistered steamers are not permitted to tow vessels on the Yangtze.

The following is added to paragraph 9: "In cases where foreign-owned vessels are concerned, the merchant interested may elect to bring the whole case and the question of fine before a joint investigation court, to be dealt with according to regulations for cases of fine and confiscation promulgated in the year 1868."

CHINESE CONTROL OF RAILWAYS AND MINES.

Minister Conger transmits from Pekin, under date of August 11, 1898, a newspaper clipping purporting to be a translation of an edict issued by the Emperor on the 2d instant, establishing a commission to regulate the working and exploitation of mines and railways in the Empire.

The commissioners appointed, adds Mr. Conger, are both members of the Tsungli Yamên. Chang Yin-huan represented his Government at Washington a few years ago, and is one of the most pro-foreign members of the Yamên. The clipping reads:

BUREAU OF CONTROL FOR RAILWAYS AND MINES.—IMPERIAL EDICT OF AUGUST 2.

[From the North China Daily News, August 6, 1898.]

Railways and mines are nowadays the most important enterprises in this Empire. We have already had the Tientsin-Shanhaikuan and the Tientsin-Pekin railways built and in regular working order for some time past, while steps are now being taken for raising funds to build the Shanhaikuan extension to the Taling River (Niuchwang and vicinity). As for the Canton-Hankau and Hankau-Pekin lines, full control had been granted the Head Commercial Company to find ways and means for the construction of these railways, and matters appear to be now taking definite shape in this connection. Then as to mines, we have the Kaiping Colliery and the Muhô (Amur) gold mines as the most successful, so far, among the many mining enterprises embarked upon, and we have already further commanded those in control to seize every opportunity to extend the works of the two mines above noted. We are, however, apprehensive, in view of the number of provinces in the Empire and the various conditions of men who will attempt to open mines of all sorts in the future, that a diversity of methods and ensuing con-

fusion will be the result, which would, of course, be detrimental to the principal object we have, of getting the fullest advantages obtainable out of each and every undertaking in this direction. It is therefore highly important that there should be a central bureau to direct, under a single system, the working and exploitation of mines and railways in the Empire, and we hereby command that a bureau of control for railways and mines be established in Pekin, to the chief commissionerships of which we now specially appoint two ministers of the Tsungli Yamên, namely, Wang Wênshao and Chang Yin-huan. The said chief commissioners shall from henceforth have special control over the opening of mines and construction of railways throughout the Empire, and companies formed for the above purposes will in future be required to apply to the said commissioners for permission and guidance in their operations.

LENGTH OF RAILWAYS IN JAPAN.

Consul-General Gowey sends from Yokohama, under date of August 24, 1898, the following printed statement, showing authorized and completed mileage of railways of Japan on July 31:

Name of company.	Authorized (total) length.	Length completed.	Name of company.	Authorized (total) length.	Length completed.
	Miles.	*Miles.*		*Miles.*	*Miles.*
Japan	853.14	821.15	Nankai	42.31	20.6
Hankai	6.22	6.22	Nanboku	12.38	12.33
Iyo	12.79	12.79	Hankaku	68.58	14.22
Sanyo	321.47	280.05	Kiwa	32.34	10.79
Sanuki	27.19	27.19	Koya	23.7	10.38
Kanshi	150.63	140.57	Chugoku	98.13	.....
Osaka	45.25	45.25	Nanao	31.6	31.6
Kobu	26.77	26.77	Seiwa	64.75	.....
Kyushiu	323.73	282.51	Iga	25.4	.....
Sobu	72	72	Zuso	10.41	7.3
Sangu	26.15	26.15	Imari	8.27	.....
Hoshiu	59.51	48.34	Omi	27.45	7.42
Kawagoye	18.4	18.4	Yamaga	12.4	.....
Ome	13	13	Kibi	13	.....
Sano	9.54	9.54	Bisei	15	3.13
Nara	38.17	37.1	Tsugaru	20	.....
Hantan	71.14	30.62	Kinbe	260.74	.....
Naniwa	16.6	16.6	Uwajima	15.4	.....
Boso	53.03	26.74	Ganyetsu	108.52	.....
Ota	12.12	9.74	Tohi	140	.....
Nanyo	6.65	6.65	Tokushima	21.56	.....
Dozo	3.06	3.06	Joso	52.12	.....
Kyoto	104.06	6.27	Shunko	46.43	.....
Chuyetsu	22.6	18.4	Tobu	48.51	.....
Narita	31.79	24.57	Ishinomaki	39.52	.....
Hokuyetsu	99.06	66.47	Mobu	32.37	.....
Kozuke	21	21	Joya	31.26	.....
Toyokawa	18.55	13.36	Tango	34.45	.....
Kayo	11.23	6.06	Tsuga	13.52	.....
Karatsu Kogyo	27.3	.....	Total	3,521.2	2,231.16
Nishinari	3.52	3.52			

RAILWAY CONTRACT IN MADAGASCAR.

Consul Gibbs transmits from Tamatave, under date of September 2, 1898, copy of a concession for a railway from Tananarivo to Tamatave, granted the Colonial Company, of Madagascar, a precursor of the French Society of Railways, of Madagascar, now being organized. Mr. Gibbs summarizes the conditions of the concession as follows: The company must have a capital of 15,000,000 francs ($2,925,000); its officers must be Frenchmen or French subjects; with the exception of coal, wood, and petroleum, all materials, rolling stock, etc., must come from France or its colonies; the concession must be finally agreed to before January 15, 1899, and lasts for ninety-nine years: This, says the consul, is the largest and most important enterprise ever undertaken in Madagascar. The articles of the contract are given below:

ARTICLE 1. The Minister of Colonies grants to the French Company of Railroads, of Madagascar:

I. The concession for the construction and completion of a railroad between Tananarivo and the sea, with actual terminus near Aniverano or Andevorante, upon the River Laroka, or upon the canal called Pangalanes.

II. Concession for the construction and completion of the division of railroad lying between the before-mentioned terminal point and Tamatave, but without obligation of execution by the company, until the railway traffic reaches an annual gross receipt of 44,000 francs per kilometer ($8,492 per 0.62137 mile).

III. The concession of 247,100 acres of land of the domain upon the conditions named hereunder.

IV. The eventual concession of the canal called "Pangalanes," on the conditions specified by article 13 hereunder.

V. The eventual concession of a port, to be established either on the River Laroka itself, or near its mouth, on one of the lagoons to which a canal has been dug, on one of the lakes near the sea, or on the sea.

VI. The eventual grant of 494,200 acres of land, in case the company builds the railroad as far as Tamatave.

VII. The eventual concession of 24,700 acres of land in the vicinity of the port which is mentioned in Paragraph V.

VIII. Mining privileges in the lands named in the before-mentioned concession.

ART. 2. The aforesaid concessions are granted the company upon the clauses and conditions stipulated in the agreements attached to the present treaty. In order that the company may avail itself of all advantages granted by article 11, the colony is forbidden, until the final approval of the contract, to grant or sell land situated on either side of the proposed road, within the space of 1 kilometer (0.62137 mile). However, within a radius of 10 kilometers roundabout Tananarivo, Moramanga, and Tamatave (eventually), the breadth of this reserved zone will be reduced to 100 meters (328 feet).

ART. 3. The company may dispose of the waters crossing the lands which will be granted to it, to be used for irrigation, in the production of motive power, etc., under the condition that navigation shall not be impeded or the rights of third parties interfered with.

ART. 4. The company will be exempt from all rent or tax for the concessions granted in accordance with the present agreements, until the expiration of fifteen years. The company will be likewise exempt from all rent and land tax for the railroad and its branches. The colony will restore to it, besides, at the end of each year, all customs duties, municipal and revenue taxes which may have been collected upon the raw materials, stores, materials, supplies, furniture, fuel, etc.—in a word, upon everything that is necessary for the construction and working of the railroad. Bonds, shares, etc., will also be free for the same period from all special taxes.

ART. 5. The colony engages not to build during the continuance of the concession any railroad or any way of communication other than roads or canals, beginning between Fenerive and Mahanoro and extending towards Tananarivo, crossing the valley of Mangoro and its tributaries.

ART. 6. The company will have for fifteen years a right of preference for the construction and operation of—

I. All railroads running from the sea, between Fenerive and Mahanoro to points of the railroad.

II. Branch lines starting from any point of the said railway in the province of the Imerina.

III. Independent lines connecting Tananarivo with any point of Imerina or with the sea.

IV. Appliances for the port of Tamatave, such as wharves, docks, piers, lighthouses, etc., which the colony may not think it best to establish at its own expense. Accordingly, the colony will not, within a delay of fifteen years from the opening of the line for operation, accord any concessions for these railways or constructions to any other person, until after informing the company. The company will have a year in which to present its proposals in reply to the above offers. The latter will be accepted by the colony only if they offer an advantage of 15 per cent reduction in the maximum tariffs, improvement of the service, or reduction of the subsidy. In case the colony, during this period, thinks it best to construct one or several railways within the space limits given, the company may ask to be charged with the operation according to the conditions of the agreements attached to the present contract, binding itself to pay to the colony a part of the gross receipts from the operation of new roads, of which it would thus become grantee or tenant; this portion to be estimated by common consent or by arbitrators. A year's time will be accorded the grantee, from the day when the colony will have notified it of its purpose to establish the line, to exercise its right of preference. If it has not used it in this time, it reverts to the colony.

ART. 7. From the opening of the railway as far as Tananarivo and until the end of the fifteenth year thereafter, the State and colony bind themselves to cause each year transportation of passengers and of materials of all kinds equivalent to at least 2,800,000 francs ($540,400). Accordingly, this sum will be due the company, even though it would be above the amount produced by transportation of this kind actually performed, and taxed conformably to the agreements.

The difference each year between the sum of 2,800,000 francs and the total price of the transports really effected will be paid at Tananarivo or at Paris, at the option of the company, by the colony and State, within five months following the 31st of December of the said year. In case the payment will not be effected within this time, the remaining sum will bear full interest at 5 per cent per annum, until the day of settlement.

ART. 8. In case transportation is interrupted for more than fifteen consecutive days, there will be deducted from the excess to be paid by the State and colony a sum calculated according to the number of days of delay. Interruptions for less than fifteen days will give occasion for no reimbursement.

ART. 9. The difference between the sum of 2,800,000 francs and the amount of the price of the transportation actually performed will be inscribed yearly on an account without interest and will not be payable, except on the following conditions: When the gross receipts, including the amount of the transportation guaranteed by the State, amount to 24,000 francs per kilometer ($4,632 per 0.62137 mile) and do not exceed 44,000 francs ($8,492), the State will have a claim on the amount of the receipts exceeding 24,000 francs of 50 per cent, to be used as reimbursement for the amounts paid for insufficiency of transportation. The taxes thus collected in favor of the State will cease when the sum paid for deficiencies is repaid.

ART. 10. When the colony and State have been repaid in full, taxes will continue in force upon the excess of gross receipts over 24,000 francs in the proportions and for the purpose hereafter indicated:

At 200 francs on 1,000 of the excess between 24,000 and 32,000 francs.

At 250 francs upon each 1,000 between 32,000 and 35,000 francs.

At 400 francs upon each 1,000 between 35,000 and 38,000 francs.

At 600 francs upon each 1,000 between 38,000 and 41,000 francs.

At 800 francs upon each 1,000 upon the excess over 41,000 francs.

The total tax will not exceed one-fifth of total gross receipts. The sums thus to be paid upon the receipts will be raised by the company either directly or by means of mortgage of the tributary lines or extensions which the Minister of Colonies may approve.

ART. 11. The company consents to allow to pass over the divisions not yet opened for operation, merchandise of which the colony may have need; but there must arise therefrom no hindrance to the work and the movement of the trains; nor will there be responsibility for accidents or for delays on the part of the company.

ART. 12. Transportation performed for the colony and State will be effected under reduced tariffs, to be agreed upon in such a way that the minimum of transportation guaranteed by the colony, of 2,800,000 francs, be not affected.

ART. 13. The canal called Pangalanes, extending from Andevorante to Tamatave, making a road of communication from Tananarivo to the sea, and being as indispensable for traffic and transportation, it is recognized that if, by April 15, 1898, the present holder of the concession for operating the canal has not exercised his right of option, as per contract approved by decree of October 6, 1897, the canal will be included in the concessions named in article 1 of the present agreement. If, after having studied the facts, the grantee of the railway declares that he relinquishes the concession of the canal, he will be bound to finish in its place the division of the railway line ending at Tamatave. In this case, there will be granted him the under-mentioned compensation for this additional expense:

(1) As long as the average gross receipts are 44,000 francs ($8,492) per kilometer, all the transportation of the colony and State from or to Tananarivo and the province of the Imerina, coming from or going to places through which the railway runs, shall pass upon this section, but without the colony guaranteeing the annual receipts, as with the main line. The amounts due for transportation made over this section will be paid according to article 29 of the agreement, and will be independent of the guaranty of 2,800,000 francs, which is applied only to the transportation made over the division named in article 1.

(2) A concession of 494,200 acres will be assigned the company, and mining privileges as defined in the agreements.

(3) The colony shall not grant the said canal, pending the continuance of the concession for the railway, so long as the gross receipts do not reach 44,000 francs ($8,492) per kilometer on the division from Tamatave to Tananarivo.

ART. 14. A delay until January 15, 1899, is granted the company to inform the Minister of Colonies if it definitely accepts the clauses to the present agreement. In case the law approving the agreement is not published before October 15. 1898,

the delay granted the company will be extended, to permit it a delay of three months from the publication of the law. In case the company fails to exercise its right of option within the period mentioned, the State and colony will be free of all obligation. The present agreement will become null and void if the law respecting it has not been voted by both chambers on the 15th of April, 1899, at the latest.

ART. 15. The company will be constituted under the rules of the French law, and its enactments will be reported to the Minister of Colonies within six months; the members of the council of administration will be Frenchmen or naturalized French subjects. The capital will be in shares to the amount of 15,000,000 francs ($2,895,000), with privilege of further increasing it.

ART. 16. In case the company, making use of its right of option, rejects the present concession, it will be allowed to select 24,710 acres of forest or uncultivated land to reimburse it for the expense of surveys.

Mr. Gibbs also transmits the full text of the agreement, which describes the construction and working of the railway in detail. Among other conditions are the following:

Telegraph lines are to be constructed along the route. Six hundred thousand francs ($115,800) are to be deposited as guaranty of the proper accomplishment of the work, one-third of this amount to be returned when the work is half done and another third when the railroad is opened.

The track must be 1 meter (3 feet 3.37 inches) wide; trains must run three times a week, and the speed must be at least 20 kilometers (12.42 miles) per hour for passengers and 15 kilometers (9.32 miles) for freight. The freight rates are:

Rates per ton per kilometer (0.62137 mile).

Class.	Imports.		Exports.	
	Francs.	*Cents.*	*Francs.*	*Cents.*
First	1.00	19.3	0.75	14.4
Second	.75	14.4	.50	9.6
Third	.50	9.6	.25	4.8

For imports and local traffic, the classification is as follows:

First class.—Cloth and textures of all kinds, clothing and shoes, furnishing goods; meats, produce, and articles of food; fruits and green vegetables, flour, liquids, wines and liquors, beer, rum, raw alcohol, coffee, tea, cocoa and chocolate, groceries, preserves, fresh and salt fish, cabinetworks, furniture of wood and iron, arms, ammunition, steel, copper, iron, wrought lead, metals, copper ware, tools, glassware, window glass, looking-glasses, crockery, porcelain, hardware, drugs, chemical products, acids, paints, tapestries, oils and lamps, willow ware and carriages, leather goods, library books, musical instruments, feathers, cotton, etc. In general, all raw products or manufactures of Europe, whose value at Tamatave, in addition to the average cash price in Europe, and of the freight, insurances,

customs duties, revenue duties for consumption, and others, is equal to more than 800 francs ($154.40) per ton.

Second class.—Manufactured products of value less than 800 francs a ton, building materials, agricultural products, raw metals, tarpaulins, grease and tallow, fancy crockery ware, shingles, marbles, bitumen, charcoal, hops, salt, mineral waters.

Third class.—Rough building materials, combustibles, raw materials in general, and especially tiles and brick, lime, cement and plaster, paving stones, sand, raw wood, coal, coke, minerals, straws, hay, manure, wheat and cereals, maize and rice.

For exports from Tamatave or from any other point, the classification is as follows:

First class.—Cloth and textures of all kinds, in piece or made up; clothing and shoes, liquids, waters, iron and wooden furniture, arms and ammunition, etc.

Second class.—Willow ware, haberdashery, all the products manufactured in the country, salt, raw alcohol, dry vegetables, raffia, etc.

Third class.—Cottons; all agricultural products, including poultry, fresh and preserved fruits; tiles and brick, lime, cement, plaster, coal, coke, hay and straw, horsehair, etc.

STEAMSHIP COMMUNICATION WITH RIO DE JANEIRO.

Consul-General Seeger sends from Rio de Janeiro, under date of September 16, 1898, the following list of steamship lines calling at Rio, together with port charges and regulations:

Steamship lines.	Nationality.	Head office.	Time of sailing.	Destination.
Lamport & Holt	British	Liverpool	Fortnightly	New York and New Orleans.
Prince	do	Newcastle-on-Tyne	do	New York.
Norton	do	Liverpool	do	Do.
Sloman	German	Hamburg	Monthly	Do.
Chargeurs-Reunis	French	Havre	do	New Orleans.
Coast lines.				
Lloyd Brazileiro	Brazilian	Rio de Janeiro	Weekly	Northern and southern ports of Brazil.
Navegação Costeira Lage Irmãos.	do	do	do	Do.
Esperança Maritima	do	do	do	Do.
Espirito Santence de Navegação a vapor.	do	do	do	Do.
Companhia Pernambucana de Navegação.	do	Recife	do	Do.
São Ivao da Barra e Campos.	do	São Ivao da Barra	do	Do.
Viação do Brazil	do	Rio de Janeiro	do	River San Francisco and tributaries.

The above companies, says Mr. Seeger, do not issue freight lists, owing to the continual changes in rates. He continues:

The steamship lines from and to the United States have formed a combination and adopted a uniform schedule of freight for the transportation of coffee from Santos and Rio to the United States. Until recently, they charged 40 cents per bag of 60 kilograms (132 pounds); then they reduced the rate to 15 cents, and for the last two weeks the rate has been 10 cents.

PORT CHARGES.

Light dues, 100 milreis, or £11 5s. ($54.74) in gold; hospital dues, 1.920 milreis (26 cents) for each man of the crew, including officers, and also 18 milreis ($2.70) for each vessel; pass fees, 9.800 milreis ($1.39); stamp duty on freight (outwards), 4 per cent and 10 per cent. The charges, except light dues, are in paper currency. The paper milreis is now worth about 15 cents in United States currency.

PORT REGULATIONS.

A vessel entering has to wait at the free port for the visit of health and customs officials, who examine bills of health issued by the Brazilian consuls abroad and receive consular manifests and all other papers relating to the ship's cargo. When all is found in order, the captain is allowed to proceed to the final anchorage, where the discharge can begin as soon as all the custom-house papers are complete.

Steamers belonging to regular lines and enjoying packet privileges can begin discharging and loading as soon as the inspectors have found the ship's papers in order, and need not wait until the customs papers are ready.

In winter (from April to November), vessels are allowed to discharge and load alongside the wharves and warehouses. General cargo is almost always discharged into lighters and thence into the custom-house or warehouses, called "trapiches." Bulk articles are discharged on shore direct in winter. Coffee is received into lighters and transported to the vessels.

STREET RAILWAYS IN GOTHENBURG.

In March, 1897, the city council appointed a committee to collect information, etc., in the matter of the projected electric tramways in Gothenburg. The committee has now made a report recommending that the city should build an electric-power station and four

electric tramway lines, overhead construction, the lines to be used by the present tramway company, on payment to the city of certain dues and a certain percentage of the profit; the company to provide the rolling material. The street railways will thus be used by the company for twenty years after they are finished, when the city will purchase the rolling stock and undertake the management of the tramways.

The Gothenburg Tramways Company, which now uses horse-power, has been granted a concession up to 1917; hence the above proposition is intended to be a compromise between the city and the company. Two other persons have asked for concessions to build electric tramways here; but the city has refused, on the supposition that it can make a satisfactory contract with the Gothenburg Tramways Company.

For several reasons, the committee has come to the conclusion that electricity is the best motive power for tramways, and that the overhead transmission system is the best.

Siemens & Halske, of Berlin, have furnished the committee an estimate, from which it appears that the total cost of construction (value of sites for the buildings not counted and value of the old tramways deducted) will amount to about 1,870,000 kronor ($501,160), of which the city's share would be 1,278,000 kronor ($342,504). This last sum includes the cost of the power plant—360,000 kronor ($96,480)—with cost of wire and tracks.

It is estimated that the yearly running expenses will be 296,000 kronor ($79,328), whereof the city's share will be 89,000 kronor ($23,852). The yearly expenses to be paid by the city on account of the electric tramways will be: Sinking fund, interest, and installments on the loan, 64,000 kronor ($17,152); running expenses, as above stated, 89,000 kronor; or altogether 153,000 kronor ($41,004).

According to the proposed contract, the company will pay yearly to the city 8 per cent of the cost of construction of the roads (the power plant excluded), or 72,000 kronor ($19,296); and certain dues per kilowatts, amounting per year to 86,010 kronor ($23,051); or altogether 158,010 kronor ($42,347). If the gross receipts of the company any one year exceed 400,000 kronor ($107,200), the company must pay the city 12 per cent of the excess. The city has reserved rights to arrange cheap trips for working people before 8 o'clock in the morning and has stipulated that passengers who have paid regular fare on one tramway line may continue on another by paying half fare in addition to the sum first paid. The work shall begin in May, 1899, and two of the lines must be finished before November, 1899, and the rest ready for traffic by September, 1900.

The cost of construction of the railways, with a length of 12,205

meters (13,347 yards), of which 11,925 meters (13,041 yards) is in double tracks, is calculated as follows:

Description.	To be paid by the city.		To be paid by the tramway company.	
Buildings:				
Boiler and engine houses, with foundations and chimney	*Marks.* 74,500	$17,731	*Marks.*	
Car depot and repair shop			98,000	$23,324
Residence for managers, etc.			24,100	5,735
Well and pipes for water supply and storehouse for coal	14,800	3,522		
Boilers and machinery (3 tubular boilers of 204 square meters—2,195 square feet—heating surface and overpressure of 10 atmospheres each; 3 standing condensing boilers, each normally of 230 horsepower, and at a speed of 125 turns 300 horsepower; 3 direct-coupled dynamos, each of 200 kilowatts and 550 volts; instrument dial and connections)	302,500	71,994		
Cables, wires, etc. (double-working circuit, poles, and wall fastenings, wire connection between the rails for return current, feeding wires, etc.)	292,400	69,592		
Rolling stock (25 motor cars, whereof 4 in reserve, with 16 seats and room for 14 standing passengers, and with 2 motors of 20 horsepower; 21 trail cars, whereof 10 closed and 11 open, each with room for 30 to 32 passengers)			519,400	123,617
Tracks (24,130 meters of tracks, with rails weighing 92.51 kilograms—201.74 pounds—per meter, and stone pavement in the neighborhood of the rails)	680,000	161,840		
Special arrangements:				
Movable crane and working machinery in the repair shop	5,000	1,190	12,680	3,037
Turntable			2,000	476
Sundry fixtures	1,000	238	7,800	1,856
Motors and transmissions in the workshop, uniforms, etc.			27,720	6,597
Supervision, etc.	50,000	11,900	30,000	7,140
Total	1,420,200	338,007	721,700	171,764
Less value of the old tramways			64,200	14,280
Total	1,420,200	338,007	657,500	157,484

The total is 2,077,707 marks ($494,494), value of the sites for the buildings not counted.

ROBERT S. S. BERGH,
Consul.

GOTHENBURG, *September 26, 1898.*

IRON MINING AND WAGES IN SWEDEN.

The first work which enables the Swedes to produce a bar of steel from what was originally a piece of gritty black mineral is that of boring suitable holes (usually 22 millimeters* wide) for the reception of the dynamite charge, generally exploded by means of a slow-

*0.86 inch.

burning fuse. In special cases, where the ground does not permit of sufficiently rapid escape from danger, electricity is employed. The place where the holes are to be bored is marked by the "Skoutare," whose duty it also is to light or direct the lighting of the fuses, and who is paid so many "öre" for every ton of mineral raised to the surface from his particular mine. In addition, he earns a fixed wage, equivalent to about $390 per annum; though many earn more than this.

It is impossible to state the exact earnings of the ordinary miner, as the amount is dependent on the capacity, strength, and power of endurance of each individual, and is also modified by a number of minor matters. On an average, however, the Swedish miner gets about $200 per annum.

At the principal mines, all the boring is at present carried on by hand, with steel rods of varying lengths, which are pounded on top with a steel-headed hammer. The men earn from 3 öre (0.8 cent) per ton upwards, or are paid per meter bored. In special cases, where the "bore hole" is over 2 meters in depth, two men are employed at a time. Where boring has to be carried on sideways (bröstbor), as, for instance, in a tunnel which runs horizontally or on a slope, the remuneration is half as much again. This increase in pay is due to the more fatiguing position and to the fact that no water can be used to facilitate the work, as is the case with direct vertical boring. Where boring has to be made upwards, the ordinary wage is doubled. An interesting detail may here be mentioned, viz, that the smiths who have to daily sharpen the boring tools (the miners' private property) are paid, not by the number of tools sharpened, but by the number of meters bored by the miners whose implements they have sharpened during the month. The inducement to the smith to do his best is obvious, for the sharper the tools, the better the work done by the man and the higher the smith's pay.

The amount of mixed ore and rock loosened by each kilogram (2.2046 pounds) of dynamite used averages 12 tons, each ton representing an average of 3.74 meters (say, 12.3 feet) bored. The detached pieces are reduced by hammers to sizes that will admit of their being readily handled.

MINERS' LIFE AND DWELLINGS.

The miners generally live in the small villages that are in the neighborhood of the mines. They go home at the end of every week. Saturday's work is shortened by two hours and Sunday is a day of rest. The average working time is eleven hours and thirty minutes per diem.

The married men, living in houses built for them alone, pay 1.50 kronor (40 cents) for one, or 3 kronor (80 cents) for two rooms per month. The unmarried miners are for the most part housed in "barracks.' These "barracks" are one-storied buildings, usually containing two apartments, each having twenty-four bunks ranged in two rows around the sides. The rules regulating behavior, cleanliness, and order are very strict, and, what is even more to the purpose, are rigorously enforced. They are fine men, as a rule, with the power and wish to work, and are, moreover, scrupulously honest. They possess that joviality and good humor which makes the native Swede companionable, practical, and reliable.

EDWARD D. WINSLOW,
STOCKHOLM, *September 7, 1898.* *Consul-General.*

PRODUCTION AND SALE OF IRON IN RUSSIA DURING 1897.

The rapid and continued increase in the amount of iron produced in Russia during 1897 occasioned much surprise as well as increased interest among the iron-producing countries of Europe. Ten years ago, Russia occupied the seventh place among the iron-producing countries; now she has advanced to the fifth place, her output during 1897 exceeding that of Austria-Hungary and Belgium.

During the year 1897, Russia produced 2,043,000 tons, an increase of 270,000 tons, or 15 per cent, which would have been regarded as unusual even in western Europe. During the past ten years, Russia has tripled her production of iron; it required twelve years for Germany, twenty-two for Great Britain, and twenty-three for the United States to accomplish the same.

While the quality of iron produced in Russia is inferior, it is largely due to the primitive methods used in its manufacture, the slow development of the iron industry, and the limited number of miles of railway in Russia, the same cause having retarded the development of all her industries and being largely responsible for the famine in 1891–92, as well as the scarcity of food in a number of provinces during the present year; but this is being remedied, and the indications now point to a largely increased activity in the production of iron during the coming year.

While the iron industry has made considerable progress in southern Russia within a few years, the development in the Ural mountain region has made rapid strides, the production increasing 108,000 tons during 1897. The building of the Trans-Siberian Railroad has caused new enterprises to spring up in that region, which is now

the scene of extraordinary activity, and has attracted the attention of capitalists of the United States as well as of the leading nations of Europe, who are exploring and developing the enormous resources of this heretofore inaccessible country.

Increased activity is reported in the Kerch Peninsula, in the Black Sea; high furnaces have been erected and are now running their full capacity. A new foundry with six high furnaces is in the course of construction at Rostoff, on the River Don. Metallurgical enterprises are being established in northern Russia for the utilization of the iron ores of the Olonetsk region. While no great plants, such as now exist in southern Russia, can be established in this part of the Empire, the number of small plants will materially increase the total amount of iron produced in Russia.

The increased demands for iron and the large dividends earned by existing corporations have caused new enterprises to spring up in the settled portion of the Empire, especially in central Russia; and existing foundries are increasing their capacity, because of their inability to fill orders. The past year is especially interesting, because the increased production covered for the first time the average increase of consumption. The production of iron from 1888 to 1893 increased by an average of 99,000 tons. Beginning with 1894, the increased production was 162,000 tons, and in 1897 it reached 270,000 tons. The consumption, excepting during the famine years of 1891–92, averaged 276,000 tons.

This large increase in the production of iron in Russia caused a decrease in the import of pig iron, while that of manufactured iron and steel increased.* Statistics for 1898 will show a largely increased demand for pig iron. Large factories have been opened at Tsaritsine and Saratov, which, with the plant now being constructed at Kazan, will require 27,000 tons annually. These plants are located on the Volga River, which is navigable only a portion of the year. The first two are operating high furnaces in the Ural Mountains, and are preparing to increase the number of same in order to supply themselves with raw material.

* Under date of August 24, the consul-general transmits a table showing the relation between the home production and the imports in the last four years, as follows:

Description.	1894.	1895.	1896.	1897.
	Tons.	*Tons.*	*Tons.*	*Tons.*
Home production	1,442,592	1,598,130	1,771,452	2,051,676
Imports	885,198	854,928	920,268	940,446
Total consumption	2,297,790	2,453,058	2,691,720	2,992,122
	Per cent.	*Per cent.*	*Per cent.*	*Per cent.*
Percentage of imports in total consumption	38	34.8	34.2	31.4

The principal railroads in Russia are owned by the Government, and the others expect to be brought under the same control in the near future, which leaves the Government the only purchaser of steel rails. The Russian mills are protected by a duty of $27.90 per ton. Early in the year, steel rails were held at $40 per ton; but the Minister of Finance fixed prices at $37.64 maximum per ton, all sales of Russian rails being made at that figure. The effect of this order has been to decrease the production of steel rails and increase that of wrought iron, the output of the latter for 1898 being estimated at 360,000 tons.

Ore is becoming scarce in southern Russia. The Krivorog mines are nearly exhausted, and, while there are other sources from which supplies can be drawn, they are not large enough to depend upon for increased business, and the Krivorog ores will not hold out more than fifteen or twenty years at the present rate of consumption; consequently, ore is advancing, and the manufacturers are looking for new sources from which to draw future supplies. It will cost $2.55 per ton to import ore from abroad duty free, or from the southern Urals, which will make the price of pig iron $7 per ton, the same as that made of Krivorog. It is known that iron ore exists in the Caucasus, but the price of the same, as well as the cost of transportation, has prevented the opening of mines. Although the distance to the southern Ural mines is considerable, making the ore cost $6.38 to $7.98 per ton, manufacturers are looking to that source for their future supply.

Although the prices in 1897 were lower, the demand was active. At St. Petersburg, the leading market, pig sold at $25.50 to $26.15 per ton. High-grade pig is imported principally from England. The prices on foreign pig iron in St. Petersburg were as follows:

Description.	During the navigation of 1897.		During the navigation of 1898.
	Beginning.	End.	
	Per ton.	*Per ton.*	*Per ton.*
Hematite, No. 1	$29.00	$29.60	.....
Cleveland:			
No. 3	26.00	27.00	$27.11
Nos. 4 and 5	25.84	26.50	26.00

Two new plants were started at Odessa and Taganrog, in the southwestern region. The former manufactures a general type of iron and steel articles, selling them at from $52.63 to $54.23 per ton at the works in Odessa. The latter, in addition to a general line of cast and wrought iron, produces roof iron, having furnished considerable quantities to contractors at Rostoff, on the River Don, and at Kharkof at $82.94 per ton.

There was little competition from abroad during the first part of the year, but it became more energetic toward the end, especially in roof iron, causing prices to drop to $3.19 and $4.78 per ton, which is explained by the statement that the decrease was due to the approaching end of the commercial agreement between Germany and England. Later on, foreign roof iron was sold in the south at the following prices:

	Per ton.
English, in Odessa:	
10 pounds iron	$74.33
9 pounds iron	78.47
8 pounds iron	79.75
Belgium, 10 pounds iron, in Odessa	70.18
Westphalian, in Alexandrovsk:	
10 pounds iron	75.92
9 pounds iron	86.45
8 pounds iron	89.64

The prices on assorted iron were as follows:

	Per ton.
German iron, in Sosnovitzy	$55.19 to $55.82
Belgium, in Odessa	52.63

The demands from Siberia are due to the constantly increasing number of immigrants. The principal intermediate point for the sale of Ural iron is Ekaterinburg, which ships annually to Siberia about 5,400 tons of iron, 720 tons of pig iron, and 3,600 tons of iron articles made by peasants.

During the past year, beginning with September 1, when the new railway tariff came into force, the different metals were shipped to the interior of European Russia by rail direct from the factories. This is of great importance to the Ural foundries, which were in need of direct communication with their clients. The Urals ship their products by rail to all parts of Russia where iron is used. The factories of Prince Beloselski-Belozerski export to England 234 tons annually of puddling iron, prepared according to the Swedish method. This fact, as well as the export of roof iron to America, are proofs of the good quality of the Ural iron.

The Volga basin plays an enormous part in the consumption of Ural iron. The quantity of iron sent annually through this basin from the Ural foundries amounts to 234,000 tons, of which 108,000 tons are consumed by the country bordering on the basin and 126,000 tons are sent by rail into the interior.

The Caucasus, owing to the development of the petroleum industry, is increasing its consumption of iron and is an important market. It was supplied with Ural iron previous to 1897; but the new Volga foundries, with their improved methods, have become strong competitors, especially for boiler iron, and a reduction of

prices is expected. The St. Petersburg foundries are working on raw material, which costs from $25.52 to $26.47 per ton, which, it is claimed, produces a profit of 15 to 30 per cent on the capital invested. This competition, it is expected, will force the Ural companies to put in new and improved plants.

It is predicted that Moscow will soon become the first market in Russia for the sale of metals, as it is now the leading manufacturing center and imports large quantities of iron from other countries, being unable to secure all that is needed in Russia.

During the past year, there was an unusual demand for every description of manufactured iron, and prices were steady. Assorted iron from the Ural, Polish, and Moscow factories was sold in Nizhni Novgorod at $59 per ton; foreign iron, at $62.20 per ton. Wrought iron from the Urals seldom reaches this market, as it is all sold along the Volga; wrought iron from Polish factories is sold here at $70.18 per ton. Roof iron is received exclusively from the Ural and Moscow factories. Small quantities of foreign roof iron have been imported recently. In December, 10 and 11 pound roof iron was sold, delivered at Moscow, at the following prices: Belgian, $81.34, and Silesian at $84.53 per ton, with a credit of four months and a reduction of 2 per cent for cash. Nine-pound iron is not imported. The Ural roof iron of middle quality costs at Moscow:

	Per ton.
10 and 9 pounds	$81.34 to $82.94
8 pounds and lighter	84.53 to 87.72

W. R. HOLLOWAY,
Consul-General.

ST. PETERSBURG, *September 14, 1898.*

ENGLISH VERSUS AMERICAN IRON INDUSTRY.

The meeting of the Iron and Steel Institute in Sweden this year has caused numerous comments and reports in the newspapers here, and the Handels-och Sjöfarts-Tidning, of Gothenburg, copies the following from a German paper:

The British iron industry is compelled to seek new sources for the supply of iron ore, as the present ones are nearly exhausted. On the success of this rests the question whether or not England shall predominate as the foremost iron and steel producing nation. Thirty years ago, English ore exclusively was used in the manufacture of iron and steel in England; but with the development of industry a better quality of ore was demanded, and hence the shipment of ore from Spain, which has furnished England with more than 100,000,000 tons.

The Spanish ore was at that time the best and cheapest raw material which could be obtained, and England could buy this ore for 10s. 6d. to 11s. 6d. ($2.55 to $2.80) per ton, while the ore from the Lake Superior mines could not be sold for

less than 20s. to 30s. ($4.86 to $7.30) per ton. No other country in Europe, with the exception of Spain and certain parts of Austria, could compete with England. With these resources, England could manufacture the cheapest and best quality of pig iron until recently, when the United States has taken the lead. The iron industry of the United States has, since the opening of the different new mines at Lake Superior, developed to a great extent. The miners have been able to furnish the manufacturers with a fine quality of ore at a very low price. The price of ore declined in 1892 to 1894 from $5.50 to $2.50 per ton. This gave the American manufacturers cheaper and better material than could be obtained in Europe. Since 1894, the price has still further declined, and is this year sold at from $2 to $2.35 per ton. This ore is of the very best quality and superior to the European product. In consequence of this, the price of pig iron manufactured from this ore has declined and brought the American manufacturers to the front line on the European market. If these manufacturers can obtain the raw material at a cheaper rate than the English, they will hold the lead, and England must give up her rank in this line.

As the Spanish mines can not produce the quantity wanted and in a near future will be exhausted, the English manufacturers have come to Sweden, in the north of which is an immense and unmeasured quantity of ore. The Iron and Steel Institute recently held a meeting in Stockholm; the members have inspected the mines in the northern part of Sweden and examined the facilities of obtaining the ore. If the transport will not prove too costly, it is undoubtedly the intention of the English manufacturers to buy the ore in Sweden.

The facilities and special arrangements of the American manufacturers for transport of the ore from Lake Superior by water are, of course, a great factor in their favor.

ROBERT S. S. BERGH,

GOTHENBURG, *September 26, 1898.* *Consul.*

DOCKS AT QUEENSTOWN.

Consul Swiney sends from Cork (Queenstown), under date of September 23, copy of a letter from the Channel Dry Docks Shipbuilding and Engineering Company, describing the extent, capacity, and general availability of the docks.

The letter reads, in part:

The geographical position of the docks and works is unequaled, situated, as they are, at the entrance to the English and the St. George's Channel, close to the sea, and in one of the finest harbors in the world.

The works cover an area of 16½ acres and include five well-equipped dry docks, the two largest being, respectively: No. 1, 430 feet long and 60 feet wide at entrance, with 16 feet draft of water; and No. 2, 365 feet long and 82 feet wide at entrance, with 21 feet draft of water. They are well equipped with all requisite machinery, tools, and plant, and are capable of dealing with every description of work with economy and dispatch. The docks and works have been brought up to modern requirements, and have been fitted with a complete electric-light installation, which is available at all parts.

The warehouses at the docks afford the enormous storage capacity of 30,000 tons, and the wharves have a river frontage of about half a mile, and can accommodate the

largest vessels up to 32 feet draft at low water. Ships can lay alongside during and after repairs, or for the purpose of discharging their cargoes into warehouse or storeships.

We are desirous of bringing before shipowners the advantages and capacity of these docks, and of extending the facilities hitherto offered for general repairs and overhaul on competitive terms. We are also prepared to quote for docking and painting work at cut prices, and the great and important advantages afforded by the great width of the docks for these purposes will be readily appreciated; and, having regard to the additional care necessary for modern steel ships, we are prepared to allow an increased time in dry dock free of any extra charge.

The docks also afford unrivaled facilities for dealing with large bottom-damage repairs requiring extended dry-dock accommodation.

In view of the docks being our freehold property, and having regard to the favorable terms on which they have been acquired, we are enabled to quote a very low tariff for their use and are further prepared to place labor and all charges on a similarly favorable basis.

We are in direct communication with main-line railways.

We can dock, clean down, and paint any size vessel and undock in twenty-four hours, if required.

A NEW WEAVING MACHINE IN FRANCE.

Every effort is being put forth at present by Roubaix manufacturers to regain the patronage which has been gradually slipping from them through German competition. The director of the Technical Institute here recently visited Verviers, to observe the working of a new rapid-weaving machine. The following is the substance of his report on the subject:

One of the most important of early inventions was the appliance which stopped the machine automatically, upon the breaking of the woof thread or when the shuttle was exhausted. Then came the American Northrop machine, which, instead of stopping the machine, insures a continual running by the mechanical substitution of full shuttles in the place of empty ones. The principal object of the Northrop machine is to increase the production of plain stuffs, principally cotton, and this result is obtained by rapid working, 190 to 195 strokes to the minute, and the suppression of stoppages, caused by the breaking of the weft, the replacing of shuttles, and threading the machine.

Although this result has been most satisfactory, the new Millar machine surpasses this and permits the use of ordinary material. The working rapidity is the only point that the two machines have in common; the principle of weaving is absolutely different. In the first place, the threads of the goods produced by this machine do not cross one another at right angles; there is also a sort of knitting stitch. In this mode of weaving, which may be called mixed or a

cross between rectangular and chain weaving, there are no blades, or weights, or even the shuttles and lathes of ordinary machines.

On one side of the working machinery, the warp thread is disposed on its frame, and beneath this machinery is the tissue, which rolls itself up. There are also two arrangements of bobbins, one above the other, each carrying from 100 grams to 1 kilogram or more of woof yarn. One series of these bobbins supplies the straight thread and the other the chain stitch. They are both propelled by a similar movement by means of an endless chain, which moves along two parallel straight parts united at their ends by two round pieces. The two straight parts vary in length according to the width of the goods. When the bobbins, drawn by the endless chain, pass into the round pieces they cease to work; but when they are brought back to the straight parts, they pass before a plate which sets them in motion—one series supplying the straight threads and the other the chain stitch. Nothing could be more simple than the Millar machine, which substitutes the knitting motion for the ordinary shuttle.

The texture shows the woven effect on one side and the knitted on the other; but the woven effect can be produced on both sides, and the chain stitch can be made less prominent in wool or cotton goods by using four threads on the bobbin that feeds this stitch, and by fulling in drapery goods.

The machine lends itself readily to weaving yarns of different color and quality, as the various bobbins can be supplied according to taste. Raw material of inferior quality can also be used, as there is little strain on the thread in this mode of weaving, the weft thread floating like that of a knitter. The production is astonishingly rapid; 120 to 200 meters can be woven in a day of ten hours. There is also great economy of hand work, one workman being able to oversee six machines. The motive force is perhaps one-half that demanded by the ordinary machine, the Millar having the motion of a sewing machine or of knitting needles.

It is difficult to predict the future of this new machine. It is a step in advance, without doubt; but it can not take the place of the Jacquard. It will be advantageously used in the manufacture of plain stuffs, drapery, and velvet. It is not very well suited to novelties. Without revolutionizing the weaving process, it realizes an ingenious idea in the line of simple mechanism. This machine will, perhaps, be a powerful factor in competing for the plain-goods market, but the field will doubtless be left clear to the Roubaix manufacture, in the line of Jacquards and high novelties.

W. P. ATWELL,
Commercial Agent.

ROUBAIX, *September 28, 1898.*

TRADE AND TECHNICAL EDUCATION IN BELGIUM.

According to a recent publication of the Minister of Industry and Labor, the number of technical, trade, commercial, and domestic-economy schools subsidized by the Belgian Government on December 31, 1897, was 410. One year previously, the number of these institutions was 376.

During 1897, three apprentice shops for boys were closed in West Flanders. The following institutions for boys were established during the same year: One trade school at Montegnée, two barbers' and hairdressing schools at Brussels, a weaving school at Oostacker, a school of design and weaving at Anthines, St. Jean Berckman's school at Liege, school of armor making at Waudre, and five technical schools, one each at Malmes, Lokeren, Neufchateau, Anderlues, and Dinant. There were also established during 1897 four commercial houses at Brussels, Liege, Dinant, and Huy, respectively. The following table shows the nature of the schools, number of professors, pupils, and diplomas issued during 1897:

Description.	Number of institutions.	Number of professors.	Number of scholars.	Number of diplomas.
Trade schools for girls.				
Housekeeping schools and classes	239	506	9,368	.....
Apprentice shops	2	5	142	43
Trade classes	3	19	114	20
Trade schools	30	294	2,947	157
Trade schools for boys.				
Apprentice shops and weaving-trade schools in Flanders	39	52	862	.....
Apprentice shops in stone cutting	11	12	274	47
Trade classes	4	13	220	6
Trade schools	18	109	1,151	37
Saint Luke schools	4	42	1,661	.....
Industrial schools	45	481	13,006	887
Superior schools and high schools	6	72	611	144
Commercial and scientific classes	9	51	1,084	38

HENRY C. MORRIS,

GHENT, *September 19, 1898.* *Consul.*

EXPORT BOUNTIES IN FOREIGN COUNTRIES.

In view of the provision in the United States tariff act of July 24, 1897, for the assessment of additional duty upon imported merchandise which had received a bounty from the country of production, a Department instruction was sent to consular and diplomatic officers in various foreign countries requesting them to furnish information as to bounties granted by the several governments. The reports received (copies of which were sent to the Treasury Department) have been summarized as follows:

ARGENTINE REPUBLIC.

Minister Buchanan writes from Buenos Ayres that no bounty is paid by the Argentine Republic upon any exported article other than sugar. The text of the sugar law reads:

TRANSLATION OF SECTIONS 3, 4, 5, AND 6 OF ARTICLE I OF THE INTERNAL-TAX LAW FOR 1897.

SEC. 3. All sugars produced in the country from the date of the promulgation of this law, or which are imported up to December 31 proximo, will pay an internal tax of 6 centavos per kilogram, which will be paid by the producer or importer.

SEC. 4. In exchange for the tax referred to, the Executive power will deliver a certificate (drawback) which will give the holder the right to export 35 per cent of the sugar upon which he may have paid said tax and to receive in return 12 centavos moneda nacional per kilogram on such exported sugar.

SEC. 5. All sugar of national production existing in the country at the date of the promulgation of this law will pay an internal tax of 1 centavo moneda nacional per kilogram, which will be paid by the holder, to whom there will be repaid 4 centavos for each kilogram he exports; it being understood that the quantity exported shall not exceed 25 per cent of quantity upon which he may have paid the tax.

SEC. 6. Whenever the current wholesale price of sugar free on board at the the point of production (including the tax paid) shall exceed $4 moneda nacional per 10 kilograms, the Executive power will suspend the delivery of the certificates mentioned in section 4.

BARBADOS.

Vice-Consul Hill, of Barbados, informs the Department that there are no enactments or orders in the colony which have the effect of extending special grants or bounties to any class of merchandise exported to the United States or to any other country.

BELGIUM.

Minister Storer writes from Brussels that the Belgian Government grants no bounty, direct or indirect, on exported articles, unless the peculiar legislation on sugar exports can properly come under that head.

A synopsis of the sugar legislation is given by Consul Roosevelt, of Brussels, as follows:

When a manufacturer of raw beet sugar declares to the excise department of the Treasury that from 1,750,000 kilograms (3,850,000 pounds) of beet juice he produces 1,000,000 kilograms (2,204,600 pounds) of raw beet sugar annually, the Government upon this declaration credits him with 450,000 francs ($86,850) at the rate of 45 francs ($8.68) for every 173 kilograms (381 pounds) of beet juice consumed—a rebate equivalent to 45 francs per every 100 kilograms (220 pounds) of beet sugar produced, or 45 centimes (0.086 cents) to the kilogram.

This law, says Mr. Roosevelt, went into effect August 15, 1898.

BRITISH HONDURAS.

Consul Morlan, of Belize, says that no export duties are levied or bounties paid on the products of the colony. The tariff may be said to be for merchandise only, adds the consul, and is levied on the merchandise of all countries alike.

CHILE.

Minister Wilson writes from Chile that the Government extends no grants or bounties of any kind to any article produced in Chile or imported and subjected to further manufacture in that country. The only Government protection afforded to Chilean industries, he continues, is given by the imposition of import duties on articles that are similar to those manufactured in the country.

CHINA.

Minister Denby informs the Department that there are no enactments or orders which have the effect of extending special grants or bounties to any class of merchandise exported from China to the United States.

COLOMBIA.

A dispatch from Minister Hart, of Bogotá, says that there are no enactments in Colombia which have the effect of extending bounties to any class of exports.

ECUADOR.

Minister Tillman writes from Quito that the Government of Ecuador does not pay bounties on any class of exports, either directly or indirectly, in the crude or manufactured state. On the contrary, a few of the chief products of the country have to pay an export duty no matter to what country exported.

FRANCE.

The British Board of Trade Journal of September, 1898, publishes copy of a French Presidential decree with reference to the granting of sugar bounties, as follows:

ARTICLE 1. The bounties which from September 1, 1898, will be granted on home or French colonial sugar, declared for exportation to other countries and French colonies, not subject to the metropolitan customs tariff, are fixed as follows:

Raw sugar in powder or small crystals, yielding at least 98 per cent in the case of beet-root sugar or 97 per cent for colonial sugars, calculated before the deduction for waste in refining, per 100 kilograms of refined sugar, 2.77 francs (53.461 cents per 220.46 pounds). Sugars of this category liable to duty and exported direct by the manufacturer himself, when they polarize at least 99.75 per cent, will be calculated according to their gross weight as refined sugars, without any deduction whatever.

Raw sugar yielding from 65 to 98 per cent in the case of beet-root sugar, or from 65 to 97 per cent in the case of colonial sugars, per 100 kilograms of refined sugar, 2.42 francs (46.706 cents).

Candied sugars calculated at their legal coefficient, refined sugars in loaves or pieces, perfectly refined, hard and dry, per 100 kilograms (net weight), 3.11 francs (60.023 cents).

"Vergeoises" per 100 kilograms of refined sugar, 3.11 francs. Refined sugar in powder or crystals, yielding at least 98 per cent per 100 kilograms of refined sugar, 2.77 francs. (When the sugars of this last category polarize at least 99.75 per cent, they will be considered as pure refined sugars, and certificates of exportation admitted in the discharge of the obligations for temporary admission for their whole weight, without any deduction whatever.)

FRENCH WEST INDIES.

In his annual report (Commercial Relations, 1896–97), Consul Tucker, of Martinique, says:

France has a complex system of bounties on sugar, in virtue of the law of 1884, modified by that of 1886. The law affords the oppor-

tunity to sugar manufacturers of France to gain all they can in quantity of sugar turned out in excess of that on which duties are paid. It is clear that, if by perfecting machinery and improving its agricultural methods the sugar manufacturers and beet growers get the maximum yield of sugar, the more that is obtained the larger is the quantity escaping the stipulated duty. Respecting the colonies, it was at first estimated that 10 per cent would be the gain as the result of the law; but during the two years from 1884 to 1886, it was found that beet sugar gained enormously, and, as the object of the law was to establish equality of treatment for the colonies in the beet-sugar industry, the law was amended in this way: Whatever the percentage of gain resulting from any given year or season of beet sugar is ascertained to be, the same percentage is accorded to the colonies for the succeeding season. This percentage is ascertained by the customs authorities in France the 1st day of September of each year, the result of the beet crop of the preceding term being then fully established. The next succeeding colonial crop gets the benefit of said percentage, which is reduced to a certain figure, in francs and centimes, per 100 kilograms. This is certainly a bounty in disguise, but is called déchet de fabrication (loss in weight).

The following is the result for several years per 100 kilograms (220 pounds) of pure sugar:

1890–91	$1.65
1891–92	1.10
1892–93	1.36
1893–94	1.11
1894–95	1.21
1895–96	1.24
1896–97	1.53

It will thus be observed that this déchet de fabrication, or supposed loss in weight, is not fixed, but varies according to the returns or outcome of the beet crop, which depends on atmospheric influences and other causes. As the average strength of Martinique sugar is 92° and this privilege is based on 100° saccharine, it can be seen exactly how much sugar factories have gained each year since 1890–91. There is, however, a restriction of the privilege accorded to the colonies in that they are compelled to ship their sugar to France in order to obtain this déchet de fabrication; whereas beet sugar can be sent to foreign countries from France and still obtain the benefit of the system. Efforts have from time to time been put forth by the colonies to have this privilege accorded on the spot, and thus afford them the liberty to ship their sugar either to France or the United States, as they may at any time deem more conducive to their interests, but they have not as yet succeeded.

There is also granted to the colonies what is called a détaxe de distance of 2.25 francs (43 cents) in 100 kilograms of 100°, as a partial reimbursement of the expense of sending their sugar to France, seeing that beet sugar has not this expense to incur. Independently of the law just succinctly explained, a recent French law grants a downright export bounty of about 2.50 to 3 francs per 100 kilograms of pure sugar, in retaliation for the new German law. In France, the former system is called boni de fabrication (benefit derived from manufacture), whereas the latter is designated prime á la sortié (bounty on export).

GERMANY.

Ambassador White states that there are no export duties in Germany. Sugar is the only article upon which a direct export bounty is paid. In the case of spirits (Branntwein), there is an indirect bounty, in that the internal-revenue tax is remitted upon spirits which are exported. The ambassador says that he understands there are also indirect bounties in the case of oil products, cacao, etc.

HAITI AND DOMINICAN REPUBLIC.

The Department has received a communication from Dr. John B. Terres, chargé d'affaires ad interim at Port au Prince, to the effect that there are no bounties or grants on any class of merchandise exported from Haiti, except on sugar; but there have been no exports of sugar for several years, the small quantity produced being consumed in the country.

A letter from Consul Grimke, of Santo Domingo, addressed to Dr. Terres, says that there are no enactments in the Dominican Republic extending bounties to any class of merchandise exported.

JAPAN.

In a communication from Tokyo, Minister Buck says that a bounty of 70,000 yen ($34,860) is to be granted annually for seven years, beginning with the first of the fiscal year (April 1) of 1897, to extend the markets for prepared tea. Of this subsidy, 61,200 yen ($30,477) is to be devoted to opening markets in North America and Canada and 18,000 yen ($8,964) to establish agencies in Chicago, New York, Canada, etc.

LEEWARD ISLANDS.

Vice-Commercial Agent Percival reports from St. Christopher that there are no enactments in force having the effect of extending bounties to any class of merchandise for export.

MIQUELON.

Commercial Agent Steer says that the French Government pays 10 francs ($1.93) per 50 kilograms (110.23 pounds) on dry codfish exported to foreign countries, French possessions, or colonies. There is no bounty paid on fresh fish; it must be dried in the colony before it is exported in order to obtain the bounty.

MOROCCO.

Consul-General Burke writes from Tangier that the Government of Morocco extends no bounties or grants to any product or any manufactured article exported to the United States.

NETHERLANDS.

Minister Newel sends from The Hague a copy of a letter from the Minister of Foreign Affairs in answer to an inquiry from Mr. Newel in regard to bounties in the Netherlands. The letter (translated) reads, in part:

The fiscal legislation of this country does not permit the according of bounties or grants other than to raw and refined sugars.

In virtue of the law of January 29, 1897, which went into effect September 1, 1897, the said articles enjoy a bounty (given in article 67), which will be accorded all sugars leaving the raw-sugar factories or refineries, no matter what their destination. The bounty is guaranteed on the general production, and is not accorded specially to the sugar exported, since those who send sugar to America will enjoy the same advantage as those who sell for home consumption.

The difference between the new system and the old one is that under the old law the "prise en charge" (taxable production) calculated for the makers of raw sugar upon the sap of the beet root and for the refiners upon the quantity of raw sugar admitted to the refineries, was below the quantity of raw or refined sugar that could be obtained from the sap; while under the new law the maker or the refiner is debited for all the sugar he obtains, with the exception of the subsequent deduction made by the new law.

The bounties accorded by the new law will in the beginning be considerably less than the existing grant, and will gradually decrease from year to year, both in

regard to the total of the bounties to be divided and the rate per 100 kilograms (220.46 pounds) of sugar. . .

Besides, the sum per 100 kilograms fixed by the new law is the maximum, and if, to cite an example, the production of the beet-root sugar makers in 1897–98 should be equal to that of the year 1896–97, the bounty per 100 kilograms of raw sugar reduced to 100 per cent would not be more than 1.78 florins (70 cents).

Article 67 of the new law, which states the amount of the deduction, is as follows:

During the working year—	For beet-root sugar manufacturers.			
	For every 100 kilograms removed from factory (article 76).*		For all manufacturers together, up to—	
	Florins.		*Florins.*	
1897–98	2.50	$1.00	2,500,000	$1,005,000
1898–99	2.35	.94	2,400,000	964,800
1899–1900	2.20	.88	2,300,000	924,600
1900–1	2.05	.82	2,200,000	884,400
1901–2	1.90	.76	2,100,000	844,200
1902–3	1.75	.70	2,000,000	804,000
1903–4	1.60	.64	1,900,000	763,800
1904–5	1.45	.58	1,800,000	723,600
1905–6 and succeeding years	1.30	.52	1,700,000	683,400

During the working year—	For sugar refiners.			
	For every 100 kilograms of sugar removed (article 76).*		For all refiners together, up to—	
	Florins.		*Florins.*	
1897–98	0.34	$0.13	500,000	$201,000
1898–99	.31	.12	450,000	180,900
1899–1900	.28	.11	400,000	160,800
1900–1	.25	.10	350,000	140,700
1901–2	.22	.08½	300,000	120,600
1902–3 and succeeding years	.19	.07½	250,000	100,500

*Article 76 referred to provide. at accounts shall be kept at the tax collector's office with manufacturers and refiners, and gives details of Government control of the sugar admitted and removed from the factory and refinery.

When the deduction of all the manufacturers together, estimated in accordance with the sum given in column 2, exceeds the sum stated in column 3, the amount given in column 2 shall be diminished in ratio. In the same way the amount mentioned in column 5 shall be diminished, if the total deduction of all the refiners, calculated according to that column, exceeds the amount stated in column 6. In estimating these deductions, sugar of 98 per cent quality, or higher, shall be considered as of 75 per cent. In the application of this article, candied sugar, raw and bastard, shall be reduced to 100 per cent. The deduction shall be made in the ratio of 27 florins ($10.85) as the amount of the excise for sugar of the same quality.

NICARAGUA.

Consul O'Hara, of San Juan del Norte, notes the establishment of an export tax of $1 gold per ounce on gold ingots, and $2 per ounce on gold dust.*

PARAGUAY AND URUGUAY.

Minister Stuart, of Montevideo, informs the Department that no bounties are paid by either Paraguay or Uruguay; on the contrary, both countries levy an export tax on their principal products.

PERU.

Mr. Neill, secretary of the legation at Lima, says there are no special grants or bounties on any class of merchandise that may be exported to the United States.

RUSSIA.

Minister Breckinridge, of St. Petersburg, says:

There exists at the present time no legislative enactment instituting bounties on exports. However, merchandise subject to excise duty is free from this tax if destined for export, the excise being a tax on internal consumption exclusively. The Imperial Government also reimburses exporters of cotton products the customs duties paid on the materials employed in their manufacture. The amounts reimbursed are:

		Rubles.	
On cotton thread and cottonades, bleached and unbleached, per pood (36.112 pounds)		2.30	=$1.78
On cotton thread and cottonades, printed or dyed (except those dyed Adrianople red)	per pood...	2.45	= 1.89
On cotton thread and cottonades dyed Adrianople red	do.....	2.80	= 2.16

On the exportation of products of gold gimp, the Government reimburses the producers the customs duties on the foil and the silver or plated gimp at 6.50 rubles ($5.02) per pood, and 10 rubles ($7.72) on gilded gimp.

---

*See CONSULAR REPORTS No. 206 (November, 1897), p. 451.

Excise duties are levied as follows:

Description.	Duty.	
	Rubles.	
Spirits of wine.....per degree...	0.10	$0.08
Products of wine.....do.....	.10	.08
Do.....per vedro (2.707 gallons)...	1.00	.77,2
Sugar.....per pood (36.112 pounds)...	1.75	1.35
Tobacco:		
(*a*) Smoking tobacco—		
First quality.....per pound...	.90	.69
Second quality.....do.....	.48	.37
Third quality.....do.....	.18	.14
"Makhorka" (inferior quality).....do.....	.08	.06
(*b*) Snuff.....do.....	.48	.37
(*c*) Tobacco products:		
(1) Cigars—		
First quality.....per 100...	1.00	.77,2
Second quality.....do.....	.60	.46
Third quality.....do.....	.30	.23
(2) Cigarettes—		
First quality.....do.....	.20	.15
Second quality.....do.....	.09	.07
Illuminating oils.....per pood (36.112 pounds)...	.40	.31

SAMOA.

The late Consul-General Churchill, of Apia, reported that under the Berlin general act of June 14, 1889, which controls the customs service of Samoa, there is no bounty on Samoan exports or any possibility of such a grant.

SOCIETY ISLANDS.

Consul Doty, of Tahiti, says that under existing regulations no bounties or other grants are extended to any class of goods produced in that colony.

SWEDEN AND NORWAY.

Minister Ferguson reported from Stockholm that the tax on the manufacture of whisky in Sweden is refunded when it is exported to foreign countries or to Norway. He gives a list of articles manufactured in whole or in part from imported raw materials on which drawbacks are allowed when the manufactured articles are exported, as follows: Sugar, chocolate, candy, bread, tobacco (manufactures of), cotton and woolen yarn, cotton and linen cloth, and articles thereof.

In Norway, also, the manufacturer of whisky receives a restitu-

tion of the tax on whisky exported; and the Department of Finance and Customs is authorized to grant a rebate on the duty of raw materials entering into manufactures exported.

No bounties are granted either in Sweden or Norway on agricultural products.

SWITZERLAND.

Minister Leishman incloses from Berne a copy of a letter from the Swiss Federal Council, in answer to an inquiry made by the minister, to the effect that no bounties or special grants are allowed in Switzerland upon merchandise to be exported to the United States.

TURKEY.

The secretary of the legation at Constantinople, Mr. Riddle, writes:

I am informed by the director-general of the imperial customs that Turkey does not pay or bestow, directly or indirectly, any bounty or grant upon the exportation of any article of merchandise from the Ottoman Empire.

VENEZUELA.

Mr. Russell, secretary of the legation at Caracas, says that the Venezuelan Government grants no special bounties to any class of merchandise to be exported to the United States.

GERMAN STUDIES OF MALARIAL DISEASE.

The German Colonial Society, one of the most important of several permanent associations at Berlin which are devoted in one way or another to the systematic development of Germany's colonial possessions and the foreign trade of the Empire, has taken up with great energy the suggestions of Professor Koch as to the necessity of more effective measures for studying and mastering the malarial diseases which now so seriously restrict the settlement and impair the value of the colonies in Africa and the East, which have been acquired and maintained at such cost of effort and outlay.

It is recognized that public hygiene, among the climatic conditions which exist in tropical countries, presents difficulties for which special preparation and provision must be made. Medical officers who are sent out for service in such countries must have a special

scientific training in the diagnosis, treatment, and prophylaxis of malarial disease. This has now been provided for by a special course of study at the Institute for Infectious Diseases, of which Professor Koch is the technical chief; and a number of young physicians who are preparing for colonial service are already at work under the direction of the great bacteriologist. When their special studies are finished, these physicians will go to their posts of duty in the colonies, each provided with a special outfit of scientific apparatus devised by Professor Koch, and will be thus equipped to take up and continue the observation, record, and study of malarial diseases, upon the result of which so much of the future value of Germany's tropical colonies will depend.

Besides these preparations for prolonged and systematic observation, Professor Koch has appealed to the Prussian Ministry of Medical Affairs, to which he is officially subordinate, for two further scientific expeditions, to be organized and conducted under his personal direction, for the purpose of completing thoroughly the preliminary studies which he has made in Italy, Africa, and India. According to the announced plan, one of these commissions will be limited to three months and be assigned to the study of malaria in Greece and Italy, in which countries the climatic conditions are to some extent influenced by bad drainage and the unsanitary habits of the people in old and badly constructed cities.

The second expedition is to occupy two years and make an exhaustive study of malaria at the deadliest fever districts of New Guinea, East Africa, and India. The keen interest manifested in this whole subject by the Prussian Ministry and Imperial Foreign Office, and the wide attention that has been attracted by Professor Koch's reports of his preliminary studies of malaria in tropical countries, encourage the belief that both the proposed expeditions will be authorized and their respective missions carried out in accordance with Dr. Koch's specifications.

He has recently left Rome, after six weeks of study in the hospitals where are treated cases of Roman and Campagna fevers, and in which he has been aided by the foremost specialists of Italy. As a result of these studies, it is now declared that the malarial fevers of Italy are identical in cause and general character with those of East Africa, and it is believed that science is on the eve of a decisive victory over this whole group of maladies by means of liquid injections of quinine into the pulse vein. The importance of this discovery to Italy will be evident from the fact that of the sixty-nine departments into which that Kingdom is divided, only six are absolutely free from malaria, and 1,200 square miles, including some of the most fertile districts of Italy, are, like the whole southeastern coast

of Corsica and much of Sardinia, practically uninhabitable on account of malarial disease.

Among the other interesting deductions of Professor Koch, is his freely expressed opinion that the indiscriminate use of quinine as a prophylactic in malarial countries is attended with great danger, and is in many cases the indirect cause of the pernicious "blackwater" fever, one of the most virulent forms of malarial disease. The very general practice among persons coming from temperate to tropical latitudes of saturating their systems with quinine taken in regular and often excessive doses is vigorously condemned for two reasons: first, because it seriously weakens the action of the heart; and, second, because the system, having become inured to the drug, fails to respond to quinine treatment in case of actual sickness. The efficiency of the drug having been exhausted as a preventive, it has no longer any important value as a remedy; and experience shows that a person debilitated by the excessive use of quinine may take malarial fever and die of it like anyone else. Professor Koch even goes so far as to assert that the increased death rate in certain portions of West Africa, where the conditions of living have been greatly improved during the past ten years, is due largely to the increased and indiscriminate use of quinine caused by its greater cheapness and the ease with which it can now be obtained. He also states that on the western coast of Africa, where all forms of malarial fever are especially virulent, cases of the intermittent type which have resisted even heroic doses of quinine have been mastered by the use of arsenic. It is well, however, to remember in this connection that a certain antipathy to quinine and a preference for arsenic as a remedy for certain fevers is a marked and well-known peculiarity of the German school of medicine, in respect to which its opinions are in sharp disagreement with those of physicians in some other countries, notably the United States.

Another fact noticed and mentioned by Professor Koch during his studies in Africa and India is that women withstand exposure to malarial climates far better than men. During the appalling mortality on the Gold Coast within the past four years, says the report, there was hardly a death among the women living out there, while every kind of man was dying—men new to the Tropics, men born in them, men who had been accustomed to them for years, even men who had battled with the ravages of West Africa for upwards of ten years.

The attempt to explain this anomaly by the fact that men are, as a rule, more exposed to the hot sun of day and the miasma of night, failed in presence of the fact that the death rate was highest among officials, merchants, and employees who work in offices, banks, and

warehouses, where no exposure to weather is involved and where medical attendance, food, and all conditions of living are the best obtainable in that country. The fact that black-water fever, so deadly to male Europeans, almost never attacked women, and that no physician has yet offered any reasonably conclusive explanation of such discrimination, illustrates how far medical science is yet from a full understanding of malarial disease and how long and difficult a road is yet to be traversed before the risks incurred by northern civilization in the effort to reclaim and civilize the Tropics will be reduced, through exact knowledge and scientific practice, to a minimum.

The subject is certainly so important as to invest with world-wide interest the efforts that Germany is now making under the lead of her foremost bacteriologist to reach a clear understanding of, and more potent mastery over, the scourge which now makes desert some of the fairest and most fertile portions of the earth.

FRANK H. MASON,
Consul-General.

FRANKFORT, *October 11, 1898.*

NEW NICARAGUAN TARIFF.

I forward copy and translation of the new Nicaraguan tariff,* established by Executive decree and operative on September 17, 1898. I am informed that it makes an average increase of about 100 per cent on the former schedule. Rice, corn, beans, and potatoes, which were formerly on the free list, now pay a duty of 10 cents (equal to 4 cents in United States currency) per kilogram (2.20 pounds). The object of the change is presumably an increase of the revenue, but its probable primary result will be a decrease of importations.

WILLIAM LAWRENCE MERRY,
Minister.

SAN JOSÉ, *October 10, 1898.*

The President of the State, considering that the customs tariff of July 25. 1888, does not respond to the actual conditions of commerce, because it does not include many new articles whose importation has increased, and because practice has shown that it contains irregularities in the classification of goods, from which an unjust distribution of their respective duties results, using the authority conferred by the constitutional reform of October 15, 1896, decrees:

ARTICLE 1. From publication of the present decree, duties on imported goods will be collected upon each kilogram gross weight according to the following rate.

ART. 2. On articles not enumerated in the previous classification, duties will be

* Noted in CONSULAR REPORTS No. 218 (November, 1898), p. 472.

paid as on those most similar; but if composed of diverse materials, duty will be paid on that which predominates.

ART. 3. Merchandise that may have been omitted and which can not be assimilated in accordance with the preceding article will be charged 200 per cent on the original invoice cost. This duty will be raised to 250 per cent with respect to those articles whose raw material is produced in the country, and it will be reduced to 100 per cent regarding articles pertaining to art and sciences. These duties will be collected in current money of the country. In the absence of invoices, the value of the articles will be fixed by adjusters.

ART. 4. When one package contains articles paying different duties, the weight of the packing will be distributed in proportion to the net weight of the different articles contained in the package.

ART. 5. The present law does not include articles proceeding from Central American States whose introduction is free or based on special duties in conformity with existing treaties.

ART. 6. Duties under the present law shall be paid into the general treasury as follows: Twenty per cent by orders on the custom-house, as per decree of October 30, 1896; 15 per cent by orders on the custom-house, as per decree of June 19, 1897; 15 per cent by documents of public credit legally settled and acknowledged; and 50 per cent in cash. This disposition does not affect the present permits, nor the deposits actually destined to their consolidation in the maritime duties.

ART. 7. The tariff of July 25, 1888, and any other ruling opposed to the present decree, is hereby annulled.

J. S. ZELAYA.

MANAGUA, *September 1, 1898.*

MINING TAXES IN VENEZUELA.

Consul Plumacher, of Maracaibo, under date of September 17, 1898, transmits to the Department copies of two Government decrees in regard to mines, translations of which are as follows:

DEPARTMENT OF AGRICULTURE, INDUSTRY, AND COMMERCE,
Caracas, August 6, 1898.

As the proprietors of mine concessions whose titles have been renewed according to prescriptions of the mining laws now in force have not complied with the duty of depositing their respective plans at this office, and this making the collection of mine taxes for areas of said concessions impracticable, the President of the Republic has decided that a period of ninety days, counting from this day, be granted to the interested parties to make and present said plans to this Department.

Let it be communicated and published.

For the National Executive.

NICOLAS ROLANDO.

Proofs existing at this Department that many mine concessionaries have obtained a definite title, and have permitted the five years mentioned in article 61 of the mining laws to pass without having put the mines in exploitation or stating that they have been abandoned, and this causing injury to the nation, as it prevents

the working of this source of riches, the President of the Republic has decided that a period of sixty days, counting from this date, be given to the concessionaries for the payment of the taxes which will grant them a prolongation of time, as specified in article 61 of the above-mentioned code.

Let it be communicated and published.

For the National Executive.

NICOLAS ROLANDO.

COLONIZATION IN VENEZUELA.

Consul Plumacher writes from Maracaibo, August 24, 1898:

I inclose translation of the annual official report of the Orinoco Company, Limited,* now known as the Manoa Company. It seems that Americans are interested in this enterprise, as I have received several letters of inquiry from parties in the United States.

The Orinoco Company, Limited, submits to the Government of the United States of Venezuela the following information regarding the work done on the concession from the 15th of June, 1897, until the 15th of June, 1898:

Since our last report, the company has commenced the construction of a large hotel, which will accommodate not only all of the employees of the company (at Santa Catalina), but all persons who from any motive whatever should visit the beautiful region of Guayama. The principal building is 100 English feet long by 40 wide and contains twenty-three large rooms besides those for the use of the officials of the establishment.

The company has established in Santa Catalina a large sawmill, in which at least 75,000 feet of wood can be sawn daily. The company has also erected a shingle mill.

Streets, avenues, and squares have been laid out in Santa Catalina, and the colonists have been suitably established. The colony now numbers 300.

During the course of the past year, almost all the colonists have suffered from serious illness; therefore, the success of the colonization has not been what was hoped. The company had taken measures to reinforce the colony with immigrants from the southern part of North America, when, unfortunately, the war broke out in Venezuela, and shortly after the present war was declared between the United States of America and Spain, rendering the efforts of the company ineffectual and retarding the development which awaits this portion of Venezuelan territory.

Owing to these circumstances, the colonization has not progressed as rapidly as could be desired, although the company has stimulated immigration by cheap passage rates and the gift to each immigrant of a certain portion of land.

Adult colonists receive 80 acres of land free and have the right to dispose of all it produces and contains, except the iron, without other obligations than the observance of the regulations of the company, the payment of 10 per cent on the gold exploited by them, and the nondestruction of the balata (wild gum) trees, of which, nevertheless, each has the right to use twenty during two years.

The company hopes soon to commence the exploitation of iron mines on a large

---

*See CONSULAR REPORTS No. 187 (April, 1896), p. 446.

scale, and is convinced that this work will facilitate colonization, as well as the now established exploitation of the balata and the development of other important sources of wealth.

The company has, during the year, explored, at considerable cost, the Amacura region, with the object of ascertaining and fixing the position, quality, and extent of the iron deposits, gold mines, balata forests, woods suitable for building and furniture, textile fibers, power of the waterfalls, etc. A map of the district is now being prepared for publication.

The company is persuaded that the concession will have a great industrial development when its eastern boundary shall be fixed by the arbitration tribunal.

It will be seen from the above that substantial progress has been made, and the company will without doubt actively continue improvements after the conclusion of the Spanish-American war.

PORT OF POINTE A PITRE.

Consul Aymé transmits from Guadeloupe, under date of September 6, 1898, detailed information for the use of vessels at the port of Pointe a Pitre. Some of Mr. Aymé's information had already been printed in the CONSULAR REPORTS,* and other points of general interest are given below. The report in full has been sent to the Hydrographic Office.

PORT FEES.

Pilot fees at Pointe a Pitre are as follows:

Vessels.	Fee.		Remarks.
	*Francs.**		
Up to 30 tons	10.00	$1.52	Optional.
31 to 60 tons	30.00	4.54	Do.
61 to 80 tons	60.00	9.08	Compulsory.
81 to 100 tons	78.75	11.93	Do.
101 to 150 tons	118.12	17.90	Do.
151 to 200 tons	144.37	21.87	Do.
201 to 250 tons	170.62	25.85	Do.
251 to 300 tons	196.87	29.83	Do.
301 to 350 tons	223.12	33.80	Do.
351 to 500 tons	249.57	37.81	Do.
Per ton, over 500	.25	.039	Do.

*Paper money.

The pilot fee covers taking vessel in and out and change of berth in harbor as often as may be desired; also pilotage in other ports of the colony on that voyage. Water dues are the only other port charge. The fee must be paid whether the water is taken or not. Pure, good water, brought 25 miles from mountain springs through

*See CONSULAR REPORTS No. 218 (November, 1898), p. 424.

iron pipes, is obtainable at the water's edge at 0.25 franc (3.9 cents) per net register ton. For steamers and vessels at temporary anchorage, the rate is 1 franc (15 cents) per 100 liters (26.42 gallons).

DISCHARGE OF CARGO.

The custom of the port regarding the discharge of cargo varies according to whether it consists of lumber or general merchandise. In a few cases, the vessel being moored to the quay, the lumber must be passed over the rail and hauled ashore at the ship's expense. Usually, however, the lumber must be made into rafts of from 20,000 to 25,000 feet and towed to owner's yard, or any designated point, where it is hauled up on shore at the ship's expense. White pine, whether alongside or from raft, costs 1 franc (15 cents) per 1,000 feet, if discharged at one point. If the raft has to be taken to more than one point, the rate is 1.25 francs (19 cents) per 1,000 feet. Only one raft a day is allowed Pitch pine delivered from raft costs 2 francs (30 cents) per 1,000 feet; alongside, 1.50 francs (23 cents) per 1,000 feet. Making the raft and towing the same are always at the vessel's expense. Labor can be had at 4 francs (61 cents) per day. General cargo must be delivered on the quay in front of consignee's store, each mark piled up separately. Shooks are always delivered alongside and within reach of the vessel's tackles when specified.

There are three stevedores in the port—one American, one Frenchman, and one negro. The American stevedore charges at the rate of 0.05 franc (0.75 cent) per barrel from hold alongside, and for placing on quay 0.05 franc (0.75 cent) additional. The barrel referred to is the ordinary flour barrel. Other cargo is calculated thus: Twenty boxes of herrings, 2½ boxes of kerosene, 2 bags of corn, 2 cases of cotton-seed oil are each equivalent to 1 barrel; 1 barrel of cotton-seed oil, 1 tierce of hams, 1 barrel of pease and beans, equivalent to 2 barrels; 1 barrel of beef or 2 half barrels of pork, equivalent to 16 barrels; 100 cases of lard, equal to 80 barrels. A barrel is estimated at 6 cubic feet, and charges on other cargo follow the established United States stevedore rates. The other stevedores generally charge 0.05 franc (0.75 cent) per package, large or small, from hold alongside, and at the same rate in addition for placing on quay.

PROVISIONS.

Fair Puerto Rican beef can usually be purchased at the rate of 2.40 francs (36 cents) per kilogram (2.2 pounds); native beef of poor quality at much lower rates. Vegetables of many varieties and good quality can be had nearly all the year round at reasonable prices. Fruits of many kinds are similarly obtainable.

GENERAL REMARKS.

The health of the port is generally excellent, fevers of a rather mild but somewhat persistent type being the chief trouble.

Care should be taken to see that the manifest agrees with bill of lading and with actual cargo, as certain ancient laws imposing heavy penalties for shortage of cargo have been recently revived.

CONSTITUTION OF UNITED STATES OF CENTRAL AMERICA.

This Government has officially published the political constitution of the United States of Central America (formerly called the Greater Republic of Central America),* which was formed by the representatives of Honduras, Nicaragua, and Salvador, in Managua, Nicaragua, on the 27th of August, 1898. I inclose a copy of the constitution. As I have just received it to-day, I have been unable to make a complete translation; but I give, as follows, an abstract of the points that may most interest the Department:

The United States of Central America, consisting of Honduras, Nicaragua, and Salvador, constitute a Federal Republic. A federal district is temporarily formed of the Departments of La Union (of Salvador), Chinandega (of Nicaragua), Valle and Choluteca (of Honduras). The executive power is provisionally installed at Amapala, Honduras.

The government of the nation is a representative democracy, and is divided into three powers—legislative, executive, and judicial.

The Federal Congress is composed of two chambers—that of senators and that of representatives. The Senate is to be composed of six senators from each of the three States and three from the federal district, elected for the term of six years by the respective legislatures. From the States and district, there is to be the same respective number of alternates. Representatives are to be elected to the lower chamber for each thirty thousand inhabitants. Until a census of the new Republic is taken, there are to be fourteen representatives from each State and four from the federal district. There is to be the corresponding number of alternates. Representatives are to be elected for the term of four years.

The President of the Republic is to be elected by popular vote. His term of office is to be four years, beginning the 15th of March. The first constitutional term is to begin on the 15th of March, 1899. Until then, there is to be a Provisional Executive Council, composed

*See CONSULAR REPORTS No. 182 (November, 1895), p. 387.

of one delegate from each of the three States, which will be installed at Amapala on November 1, 1898. The Executive Council is to adopt the laws of one of the States, to prevail provisionally in the federal district, until Congress determines the definite laws. The first Federal Congress is to be installed the 1st day of March, 1899.

I translate, as follows, those articles of the constitution relating to foreigners:

ART. 45. (3) Foreigners who accept any salaried public office, except that of professor (in schools), must be naturalized citizens.

ART. 46. Foreigners are obliged, from their arrival in its territory, to respect the authorities of the Republic and to observe its laws.

ART. 47. Foreigners enjoy in the Republic the same civil rights as the sons of the country; consequently, they can acquire all classes of property; but they are subject, in regard to this property, to the ordinary and extraordinary taxes of a general character to which natives are subject.

ART. 48. Foreigners shall not be able to make claims or demand indemnification of the Republic, except in such cases and in such manner as may be done by the natives.

ART. 49. Foreigners shall not have recourse to diplomatic intervention, except in case of a denial of justice. If in contravention of this disposition the claims they make should not be settled amicably, and by them injuries should be caused to the country, they shall lose their right to dwell in it.

ART. 50. The laws can establish the manner and cases in which entrance into the territory of the Republic may be denied to a foreigner, or his expulsion ordered on account of his being considered pernicious.

I believe that the faithful execution of this constitution of the united Republic will greatly promote the establishment of a state of permanent peace and order in the three States composing it.

WM. M. LITTLE,
Consul.

TEGUCIGALPA, *September 15, 1898.*

GUNPOWDER IN BRAZIL.

In reply to inquiries from a New York export association, Consul Furniss sends the following from Bahia, under date of August 24:*

There is one factory in this consular district devoted to the manufacture of powder. This is situated in Cachoeira, a town of about 5,000 inhabitants, some 20 miles distant from here, and reached by daily boats. The town is on the Paraguaçu River, a few miles above the head of the bay on which Bahia City is situated.

I understand that the annual output amounts to about 4,000 kegs of 25 pounds each, and that it retails at from 30 to 40 milreis per keg. As the milreis varies each day in value, a definite price in

* Advance Sheets of this report have been sent the association.

United States money can not be given; but to-day a milreis is worth 14.2 cents in United States currency.

The greater part of the manufacture is common black sporting powder; a very little of a better grade is made. Much of the powder is used to manufacture native fireworks, consisting of poor roman candles, skyrockets, pin wheels, and the like, for which there is great demand, on account of the numerous church festivals and saint days, and the national and State holidays, to say nothing of the large amount daily and nightly used for private parties and receptions, or to celebrate the drawing of a prize at one of the many lotteries.

The powder produced here does not suit the requirements of the market, but, on account of the State restrictions, and more particularly the municipal restrictions of Bahia, and in view of the fact that this is the only port of entrance into this consular district, the people have to be content with that of local manufacture, and the Cachoeira powder is much used in the surrounding country.

There are no Government regulations prohibiting the importation of powder, but after it arrives in the harbor it is loaded on a Government boat and conveyed to the quay, whence it is removed to the Government magazine, about 4 miles distant; all this at the expense of the importer. At this magazine the Government keeps a guard, and an importer making a sale is required to petition the chief of police of this city, who, at his discretion, gives license for the removal of part or all of the quantity petitioned for. For this service the fee amounts to about 50 milreis ($7.10), and the petitioner is compelled to tell the destination of the powder to be withdrawn. The license for removal is presented to the custom-house, the duty paid, a permit received, and, upon presentation of this to the officer in charge of the magazine, the powder is delivered. The party purchasing from the importer must sign the receipt attached to the permit issued by the police, swear to it before a notary, and return it to the police department, under penalty of a heavy fine for noncompliance.

Powder, according to present regulations, may stay in the Government magazine until wanted; a charge of 1 per cent being exacted for storage, which amount is payable upon withdrawal. Ample storage is provided for any amount that may be imported.

In the city of Bahia, no powder is allowed to be kept, except in cartridges and shells for sportsmen's use; and, on account of the restrictions, there is only one store where these are handled. There are several places where powder can be purchased clandestinely, at prices sufficiently high to reimburse for risk run. This practice is indulged in by the smaller stores, where it is sold under the name "farinha prata," or black flour.

CARBONS IN BRAZIL.

In answer to a New York correspondent (to whom Advance Sheets of this report have been forwarded), Consul Furniss writes from Bahia, August 24, 1898:

The State of Bahia is said to be the sole seat of the carbon industry. The carbons have been found for years; but there has been no market until the commencement of the present decade, when, on account of their hardness, they were sought by makers of so-called diamond drills. As the demand grew greater, the supply decreased and prices rose.

The region in which they are found is in the interior of the State, and is reached only after a long and tiresome journey. One goes from Bahia by boat to St. Felix and then by rail to Bandeira de Mello. This is the edge of the diamond region, and carbons are always found near diamonds. The most productive region is further up the Paraguaçu River, and to reach it one goes overland by mule, following a rough and hilly pack trail for a couple of days.

It is thought that diamonds and carbons are found all through this section; but, on account of the rude methods of mining, only the bed of the Paraguaçu and its tributary the San Antonio and the side of a range of mountains called Serra das Lavras Diamantinas are worked. The carbons are found in a kind of gravel called cascalho, and this occurs in the river bed beneath the silt and on top of a stratum of clay; in the mountains, beneath a stratum of rock and above the same stratum of clay; and in the surrounding country, beneath several strata of earth.

To obtain those in the river bed, a place of not more than 20 feet in depth and where the current is not too rapid is selected. A long pole is then planted there, and naked native divers go down this pole, taking along with them a sack kept open with a ring. They first scrape away the silt and then proceed to fill the sack with the underlying gravel, removing all the gravel down to the clay. As soon as a sack is full, the man above, in one of the native canoes made from a chiseled-out tree, is signaled to. The bag is raised to the surface with the aid of the diver below, taken to the shore, and dumped at a sufficient distance to prevent being washed away by any sudden rise in the river. This operation is repeated day by day for the six months of the dry season. At the commencement of the rainy season, when diving has to be suspended on account of the strong current and great depth of the river, the gravel is washed and examined for carbons and diamonds. The divers are quite

skillful, and many of them can remain below for a minute at a time; there are some who stay as long as a minute and a half. Of course, the gravel becomes partly recovered by silt while they are at the surface, thus causing extra work, which would be avoided by more modern methods. Places where there is greater depth of river can not be worked at all.

The other method of mining consists in drilling through the rock in the mountain side, and by a series of tunnels removing the diamond and carbon bearing gravel. It is piled up in the dry season and washed during the rainy season, by conveying the water down the mountain side in sluices. The greater part of the carbons is found in the mountains, because they are more accessible there than in the river bottom.

No mining of any consequence is attempted elsewhere than above stated, except along the river bank; and little is done there, because the water runs in as soon as the carbon-bearing gravel is reached, and with their rude methods the natives can not bail it out fast enough. The reason why no mining is attempted in other places is on account of the lack of water to wash the gravel after it has been raised; the idea has never occurred to them to use modern mining machinery, or, if it has, they have not the capital to invest.

Carbons are found in all sizes, varying from that of a grain of sand to one of 975 carats. This large one was picked up in 1894, on a road where the gravel formation was exposed, and was sold in Paris for 100,000 francs ($19,300). The most valuable ones are those weighing from 1 to 3 carats; the larger ones have to be broken, and there is always great loss, as they have no line of fracture. Thus the largest carbon found, after being broken into salable pieces, brought considerably less than 100,000 francs, the cost price.

About two years ago, there was a local combination to keep up prices; but the chief promoter failed, and there has since been no attempt to combine. The price that now prevails is due entirely to the great demand, small supply, and the laborious method of mining. The small supply is due to the crude methods. Frequently a pair of workers will obtain only three or four carbons as a result of their six months' work, and for these they demand and receive a good price.

The large export dealers have their business here and agents in the mining region; but as the miners keep posted as to the market price, the dealers are little more than commission houses.

The largest exporter in Bahia is Theophilo Gomes de Mattos, Rua Cons. Dantes. He has at present about 125 carats of carbons of well-assorted sizes, and will ship to the United States on the same terms as to Europe. He has never sold to the United States because the

purchasers there insist on particular sizes, and he can not sell picked stones, but an assortment, as he buys them, and for which there is always a demand. The price to-day is about $5 per grain, making a carat worth $22.50; but the price fluctuates so much that no definite information can be given. Another dealer in Bahia is Francisco de Mello & Co., Rua Cons. Dantes. They should be addressed in Portuguese or French, though the first named reads German.

MANIÇOBA RUBBER IN BRAZIL.

The maniçoba plant is grown in the north of Brazil, especially in Ceara and Rio Grande do Norte and Parahyba. In price, the rubber from these States is second to the seringueira or Para rubber, and for certain classes of work is preferred to the latter.

The interest in the growth of the plant is steadily increasing through the three States mentioned above, and is also extending rapidly throughout Pernambuco, Alagoas, and Bahia, giving better results with less labor than almost any other agricultural pursuit.

The seed should be planted at the beginning of winter, red or brown soil giving the best results. At the time of planting, the soil should be neither excessively dry nor wet; once the tree has reached the age of two years it can resist any weather, but, of course, the amount of milk will always more or less depend on the climatic influence.

At six years the plant will have reached its maturity, which is the time best suited for tapping, though this may be begun at the age of two years. After six years the tree will produce annually, until the age of thirty years, from 2 to 5 kilograms (4.4 to 11 pounds) of rubber, if in good condition. After thirty years the yield will slightly decrease, the life being at least a century under fair conditions.

The sap is prepared in exactly the same manner as the seringueira of Para, but is of a deeper brown color after smoking.

The way the greater part of the maniçoba rubber is produced in the States above mentioned, is to simply cut the bark of the tree, letting the sap run in drops to the base, where by the action of the sun's rays it coagulates and forms an irregular solid mass, which is gathered by the natives and sold to the middlemen, by whom it is shipped to America and Europe.

The price per kilogram ranges, in these States, from 2 to 5 milreis (28 to 70 cents per 2.2046 pounds), according to quality.

Besides the maniçoba, these States produce a great quantity of mangabeira rubber, which is of an inferior grade to the maniçoba and is used for covering cables, etc.

Below is given a table of the rubber export from Ceara for the years 1893 to 1897, inclusive:

Year.	Quantity.	Value.	
	*Kilos.**	*Milreis.*†	
1893	135,569	1,129,742	$259,840.66
1894	146,627	1,221,892	242,378.40
1895	146,627	1,592,567	302,587.73
1896	324,327	2,702,725	486,490.50
1897	475,693	3,964,108	594,616.20

*1 kilogram=2.2046 pounds.

†The paper milreis is estimated as follows: 1893, 23 cents; 1894, 20 cents; 1895, 19 cents; 1896, 18 cents; 1897, 15 cents. See Commercial Relations for 1896–97, vol. 1, p. 798.

BENJ. F. CLARK,
PERNAMBUCO, *August 26, 1898.* *Consul.*

MANGABEIRA RUBBER IN SÃO PAULO.

During the last six months, several consignments of mangabeira rubber arrived in Santos from the interior, and were quietly shipped to Europe. The results being fair, other expeditions were sent to the interior, and the arrivals of rubber are daily increasing, promising to be an important source of revenue for this State, which, so far, has had to rely solely upon the export of coffee.

Among the many articles in the native press which have recently appeared on this subject, I would call attention to one in the Deutsche Zeitung, of São Paulo of August 11, 1898, of which I give an extract:

Brazilian rubber is extracted from trees belonging to three distinct families—

(1) *Hevea brasiliensis* Müll Arg. or seringueiro of the Amazon (Pára rubber).

(2) *Manihot glaziovii* Müll Arg. or maniçoba of Ceara (Ceara scraps).

(3) *Hancornia speciosa* Gom. or mangabeira (mangabeira rubber).

The first and second kinds do not concern São Paulo, as nothing has resulted from the seeds distributed by the Government among farmers. The third is found in the western part of São Paulo. It does not thrive in the east and on the coast, probably on account of the moisture or some condition of the soil.

Formerly, mangabeira rubber brought only about half as much as that of Para, but the price has risen. It is said to be much harder and therefore preferable for certain purposes.

The newspapers say that during the first six months of 1898, 76,498 kilograms (168,647 pounds) have been transported by the Magyana Railroad. Experienced workmen from the State of Bahia are tapping the trees, the owners receiving one-third of the net profit, while buyers pay about 75 milreis per arroba (at the present rate of exchange, about $11 for 33 pounds). One man is said to be able to extract as much as 3 kilograms (6.6 pounds) daily.

The Government is desirous of fostering the cultivation of this useful tree, and is considering the payment of subsidies to farmers occupied in this industry.

GEORGE ROSENHEIM,
SANTOS, *August 7, 1898.* *Acting Vice-Consul.*

COFFEE GROWING IN PARAGUAY.*

Paraguay can and ought to produce coffee, not only for the consumption of South America, but also to export to foreign markets, where it would compete with the best known in quality and cheapness.

The first attempts in the cultivation of coffee gave complete satisfaction to intelligent persons and observers, and the interest which the Agricultural Bank in Asuncion has manifested in impressing the importance of its cultivation upon agriculturists has been entirely justified.

Brazil is supposed to produce more than half the coffee consumed by all the world, and it is the principal wealth of the States of São Paulo, Rio de Janeiro, Bahia, Ceara, Minas Geraes, etc., and the area of cultivation extends even into the State of Matto Grosso, which borders directly upon Paraguay.

Among the many varieties of coffee, that most cultivated by Paraguay is the Yungas, because it comes from Bolivia, whose geographical position is pretty much the same and whose soil is very similar. It is believed that this coffee can compete with the best known in the markets of Europe, where it already figures, though in small quantities. Authorities state that the Yungas coffee of Peru and Guatemala is as good as any produced on the American continent. The grain is well developed, of exquisite aroma, green-yellow in color, and in size and weight superior to Mocha coffee, which, in general characteristics, it resembles. The plant is vigorous, develops rapidly, and produces in three years.

There are coffee plantations which have been in existence for many years, but they have not been cultivated, being left to some extent to the excellent climate. These plants produce a variety similar to that cultivated in Brazil and Bolivia, coming from the Arabian species. The production in this line is not extensive, and the consumption is local.

The plantations which have been made of late years prove profitable investments; a market can be found in Paraguay for all the coffee produced.

The coffee plant thrives in tropical countries having a mean temperature from 68° to 78° F. In Paraguay the thermometer in 1893 was as follows: January, 78.22°; February, 78.96°; March, 78.29°; April, 70.31°; May, 63.55°; June, 58.42°; July, 67.24°; August, 63.84°; September, 64.87°; October, 70.32°; November, 75.46°; December, 84.45°. The mean temperature was 71.16°.

*The information in the above report was compiled to an extent from a treatise by the Paraguayan consul-general in Uruguay.

The land is suitable for the cultivation of the plant, being damp, level, and easy to cultivate. The selection of land for the growing of coffee ought to be made by a person having knowledge of the soil, because there is no fixed rule which one can follow in this matter. The east, west, and north of Paraguay present more or less advantages in this line, according as they are affected by atmospheric influences. Dry spells are far more dangerous than heavy frosts. Ferruginous, clayey soil is excellent for the cultivation of coffee. This lies on each side of the railroad from Asuncion to Villa Rica.

There are now about 343,407 coffee plants in the Republic, and all the product can be readily disposed of in the Asuncion market, because the people are great coffee drinkers.

If time and attention be devoted to this branch of labor, it is believed that coffee growing will be one of the most profitable industries of Paraguay.

JOHN N. RUFFIN,
Consul.

ASUNCION, *August 30, 1898.*

ORANGES IN PARAGUAY: SUGGESTIONS TO IMMIGRANTS.

Oranges are of prolific growth in Paraguay, being found everywhere, many growing wild. They are cultivated, however, on farms. The seed will bear five years after being planted. The orange flourishes all the year, except in January, February, and March. A 7-year-old tree bears about 1,000 oranges.

The orange is one of the most generally used articles of food in Paraguay, forming a staple eatable for the poor, particularly in the country. Hogs are fattened on them, and orange-fed pork is very good.

The exportation commences about the end of May and lasts till November. The boats are loaded all along the river, women with flat baskets on their heads carrying them on board. There is no export duty. Most of the oranges are sent to Buenos Ayres and Montevideo; during the season, an average of 300,000 oranges are exported.

The orange is usually about 3 inches in diameter and is very sweet. There are three classes which might be mentioned—the ordinary Paraguayan orange, the mandarin, and the bitter orange. The first I have described and herewith send a few seeds for the purpose of ascertaining if they will germinate in southern soil.*

*Sent with copy of report to Department of Agriculture, October 24, 1898.

The second (mandarin) is very small and not as sweet as the first. It is more expensive than the orange, its pungency making it popular.

There are not a great many mandarin plants in Paraguay, and the product goes largely to supply the demand in Buenos Ayres and points farther south. The sale of this orange is ready, and the price is remunerative. It seems probable that in the southern part of Florida, which is in almost the same latitude north as Paraguay is south, this fruit would flourish.

The third class is the sour or bitter orange, from whose skin marmalade is made. There is also an extract made from the blossoms. Some Frenchmen are engaged in this business, which is remunerative.

Allow me to state, for the benefit of those who contemplate entering this country for agricultural purposes, that the best sites would be along the river, accessible to boats which can carry produce to the markets of Buenos Ayres and Montevideo. There appears to be an opportunity for profitable investment in this line.

The Government of Paraguay pays passage of immigrants from Buenos Ayres to the land on which it is desired to settle; furnishes oxen and agricultural implements, the latter to be paid for in labor or produce. Some agricultural implements, however, are loaned free of charge by officials of the colony. This point I hope to make clear: What the Government furnishes is charged for, except the passage from Buenos Ayres. The land is good and fertile, and recommends itself to the favorable consideration of all.

JOHN N. RUFFIN,

ASUNCION, *September 2, 1898.* *Consul.*

ACKNOWLEDGMENT TO CONSULAR OFFICERS.

The Department has received the following, under date of September 29, 1898, from Mr. Walter Wardrop, secretary of the National Board of Trade of Cycle Manufacturers, with the request that it be given publication:

Through the Department of State, the members of the National Board of Trade of Cycle Manufacturers desire to gratefully return thanks to the consuls and consular agents who have been instrumental in transmitting information upon the state of the bicycle trade in foreign countries. The bicycle makers of this country have leaned heavily upon the consuls for their supply of knowledge respecting the conditions existing in foreign markets, believing that their keen observation and loyalty would be of far greater service

than the opinions of prejudiced observers. The accuracy with which the consuls have foreshadowed trade difficulties in European markets, and formulated useful methods for securing a foothold in remoter parts, have been conspicuous features of their valuable work in behalf of the bicycle industry. The shrewdness of their advice, offered for the purpose of expanding our trade, has many times operated to great advantage. They are, in fine, recognized as the most reliable and efficient agents with whom the exporters of bicycles and parts from this country are privileged to sustain relations, and there is more than common cordiality expressed in acknowledging the substantial nature of their assistance.

CANADIAN TRADE WITH SOUTH AFRICA.

Consul-General Stowe sends the following from Cape Town, dated August 24, 1898:

I inclose a clipping from the Cape Times, of this city, which I believe will be of interest to the exporters of the United States. The very large trade the United States now has with South Africa must not be lost. Every year sees an increase.

The secretary of the Toronto Board of Trade has recently received a communication from Mr. Parmelee, the deputy minister of trade and commerce, in reference to the industrial and arts exhibition to be held at Grahamstown, South Africa, between December 15, 1898, and January 21, 1899.* In making this communication, Mr. Parmelee takes the opportunity of calling the attention of all parties interested in the extension of Canadian trade, to the opening that exists in South Africa for nearly all varieties of Canadian products and manufactures. In consideration of the fact that both countries form part of the British Empire, there has been a strong feeling for a long time that Canada should be encouraged to extend her commercial relations with the Cape, and the African colonies were only too glad to give all the inducement in their power. There was even an idea of a proposed differential tariff on goods arriving from Canada and the United States, under which the former were to be specially favored. This appears to have been dropped for the present; but it may be hoped that the laudable endeavors to encourage and increase the trade between our two colonies will be crowned with success. As the South African colonies are not themselves manufacturers, nearly all their manufactured goods have, in consequence, to be imported, and these colonies would only be too glad if Canada could take a worthy share of the trade. The imports to South Africa show a rapid increase during the past five years, and many of the articles imported might be supplied in considerable quantities from Canada. The coming exhibition should afford an excellent opportunity of introducing and exhibiting Canadian products and manufactures in South Africa. If advantage is taken of it, the result may be the opening up of important trade relations between these two sections of our Empire. Special facilities are to be afforded by the

* See CONSULAR REPORTS No. 214 (July, 1898), p. 468.

Dominion authorities for the transport of all goods intended for this exhibition, and it is announced by the South African authorities that all exhibits arriving from abroad will be brought from any part of the colony in bond, carried free to the exhibition grounds, and will not be subject to duty unless sold.

In a report dated August 16, Mr. Stowe notes that, according to a telegram from the Canadian Government to the prime minister of Cape Colony, all Canadian exhibits to the South African exhibition will be transmitted free of charge from the Canadian ports of embarkation to the Cape. The consul-general urges that a similar arrangement be made for United States exhibits.* It is not necessary, he thinks, for manufacturers to send representatives; but the exhibition affords an excellent opportunity for the introduction of United States products.

IMPORTS INTO NATAL.

I submit the following statement of imports of the colony of Natal, South Africa, for the six months ended June 30, 1898:

Origin.	Value.			
	1898.		1897.	
United Kingdom	£1,683,418	$8,192,354	£2,162,692	$10,524,741
Africa	57,328	278,987	65,080	316,712
Asia	95,287	463,714	87,956	428,038
Australasia	83,663	407,146	30,769	149,737
Argentine Republic	22,913	111,496	42,677	207,688
Austria	97	472	886	4,312
Brazil	8,291	40,348	9,292	45,220
Belgium	24,087	117,219	45,791	222,742
Canada	.....	.....	4,346	21,150
Denmark	.....	.....	17	83
France	4,757	23,150	10,524	51,215
Germany	103,892	505,590	114,289	556,187
Holland	12,105	58,909	33,087	161,018
Italy	2,127	10,351	6,859	33,379
Portugal	873	4,248	1,100	5,353
Sweden and Norway	68,535	333,526	119,799	583,002
Switzerland	116	565	.....	.....
United States	271,505	1,321,279	415,662	2,022,819
Total	2,438,994	11,869,354	3,150,826	15,333,396

* See CONSULAR REPORTS No. 217 (October, 1898), p. 311.

I give below comparative statement of imports, for the same periods, of such goods as have been in part imported from the United States:

Articles.	1898.		1897.	
Agricultural implements	£6,679	$32,503	£10,901	$53,050
Animals:				
Donkeys	6	29	6,495	31,608
Horses	11,284	54,914	3,328	16,196
Mules	2,285	11,120	9,293	45,224
Butter	38,593	187,813	16,375	79,689
Carriages	8,991	43,775	37,273	181,389
Cheese	8,691	41,295	7,454	36,265
Clocks and watches	3,683	18,023	4,613	22,451
Grain:				
Barley	78	380	322	1,567
Beans and pease	549	2,672	371	2,176
Corn	9,477	46,120	98,315	478,450
Oats	5,773	28,094	5,428	2,642
Wheat	18,893	91,943	26,084	126,938
Flour	103,057	501,527	105,695	514,365
Cotton manufactures, piece	34,049	165,699	26,859	130,709
Fruit, dried	3,940	19,174	5,270	25,646
Hats	11,568	56,296	11,959	58,158
Hoes and picks	745	3,626	1,183	5,757
Iron:				
Bar	5,966	29,034	15,993	77,830
Hoops	1,136	5,524	313	1,523
Corrugated and galvanized	32,841	159,822	58,606	285,206
Pipes	4,739	23,062	6,150	29,929
Fencing wire	9,849	47,930	37,148	180,781
Lard	3,017	14,682	1,601	7,791
Leather.				
Harness	18,369	79,393	32,173	156,571
Unmanufactured	1,138	5,538	384	1,869
Machinery (all kinds)	141,687	689,520	224,403	1,092,057
Meats:				
Beef	8,157	39,696	.....	.....
Salt and tinned	40,878	198,932	49,131	239,096
Hams and bacon	14,508	70,603	9,482	46,144
Oil:				
Paraffin	13,509	65,742	19,158	93,232
Linseed	2,459	11,967	5,382	26,191
Lard	87	423	1,299	6,322
Railway material	19,776	96,240	26,859	130,709
Soups	16,766	81,658	15,293	74,423
Steel	3,456	16,819	1,793	8,726
Telegraph material	15,515	75,504	6,700	32,606
Tobacco:				
Unmanufactured	1,192	5,801	1,396	6,794
Cigars	6,880	33,482	14,303	69,606
Manufactured	7,245	35,258	9,553	46,490
Wood and timber (unmanufactured and manufactured)	61,424	298,920	180,539	878,593

CAPE TOWN, *August 8, 1898.*

J. G. STOWE,
Consul-General.

EXPOSITION IN WESTERN AUSTRALIA: INDUSTRIAL CONDITIONS.

The Department has received a note from the British embassy, dated October 17, 1898, inviting this Government to take part in the Western Australian International Mining and Industrial Exhibition, which is to be held at Coolgardie in March, 1899, under the patronage of the government of Western Australia. Copies of the programme, plans, etc., are inclosed.

The special commissioner of the exhibition, Mr. E. T. Scammell, in a circular letter to British manufacturers, says:

The opportunity afforded to British exhibitors is one of especial value and importance in view of the fact: first, that Western Australia, by its rapid development, its great resources, and its unlimited prospects, affords exceptional openings for British goods; second, that the exhibition is intercolonial in its character, and will be attended by many visitors from the whole of Australasia; third, that the location of the exhibition, at Coolgardie, within 24 miles of Kalgoorlie and 36 miles of Kanowna, gives it the command of the leading gold fields of the colony and assures the special attention of all who are concerned in the gold-mining industry, not only of Western Australia, but of all gold-producing countries; and, fourth, that the government of the colony has accorded the exhibition its active patronage, and is prepared to afford to intending exhibitors every facility in its power.

The following, among other classes of manufacture, will find special scope for exhibition, and, if so desired, of sale, viz: Mining, timber, and agricultural machinery; gold-saving appliances; electric, gas, and oil motors and lighting apparatus; road carriages and bicycles, tent and dwelling-house requirements, ironmongery and galvanized-iron and wire work, condensers and filters, sanitary ware, cooking appliances and food specialities.

The following extracts are taken from the regulations for exhibitors:

The exhibition will be opened on the 21st day of March, 1899, and will continue open during the day and evening for a period of at least three months.

The charge for space inside the building will be 2s. (48 cents) per square foot, with a minimum charge of £2 10s. ($12.16). Space in main avenues will be charged extra, according to position; and wall space, which must be mentioned when making application, will be charged according to location. In all cases the amount of space money must accompany the application form, and no exhibits can be admitted unless all payments for space have been made. Spaces not occupied within fourteen days previous to the opening of the exhibition will be otherwise allotted, and all payments made in respect thereof absolutely forfeited. Exhibitors will have to pay all expenses of conveying, delivering, arranging, fixing, and removing their exhibits, and also the cost of the erection of all fixtures, screens, and counters, when required; and they must personally or by a representative superintend the transmission, reception, unpacking, installation, and, at the close of the exhibition, the removal of their goods.

Motive power—steam, gas, oil, or water—will be supplied by the directors at cost price and subject to certain regulations. Exhibitors requiring such motive power

must fill up the special application form which has been prepared for that section, and which will be supplied on application. Exhibitors requiring counters, shafting, pulleys, and belting must supply them at their own expense.

Schedules and forms of application for space may be had from the secretary or any of the official agents. These must be filled up and returned before the 1st of January, 1899, to insure the exhibits being entered in the official catalogue.

The directors will endeavor to obtain from the various railways, carriers, and steamship companies special terms for the conveyance of exhibitors' goods to and from the exhibition, and these arrangements will be communicated to intending exhibitors.

All packages containing goods for the exhibition must have painted on two sides the distinctive exhibition mark, with the name and address of the exhibitor. Labels for this purpose will be supplied to each applying for same. Packages from foreign countries must likewise have painted on two sides the distinctive mark, set out in customs regulation No. 4, page 10.* They must also be marked in such a way as to show distinctly the name of the exhibitor and the country from whence they came.

No case, counter, platform, screen, or partition must (without special permission) exceed the following dimensions: Show cases and partitions, 10 feet above the floor; counters, 2 feet 6 inches above the floor; platforms, 1 foot above the floor.

Exhibitors are requested to mark the selling price of all articles exhibited, for the information of visitors, to whom they may explain their exhibits; but they will in all cases be forbidden, unless special permission in writing has been obtained from the directors, to invite or to allow visitors to purchase goods for removal at the time of purchase, the exhibition being intended for the purpose of display. Orders can be taken within the exhibition, but goods must be delivered from establishments outside. Special regulations will be made for perishable articles or goods manufactured in the exhibition.

No goods will be received prior to the 1st day of March, 1899, without the special permission of the directors, nor after the 15th day of March, 1899; but arrangements may be made for motors, heavy machinery, boilers, or any exhibit requiring underbuilding.

No explosives or any substance which in the judgment of the directors are dangerous will be admitted; but they may be represented by models.

RESOURCES OF WESTERN AUSTRALIA.

A pamphlet descriptive of the resources of Western Australia accompanies the programme for the exhibition. The following is extracted as of general interest:

Gold.—In 1886, the output of gold was 302 ounces, valued at £1,147 ($5,581). In 1897, the output was 674,993 ounces, valued at £2,564,976 ($12,482,445), while

---

* *Extract from customs regulations.*—4. Exhibits shall be entered for the exhibition bond, Coolgardie, on arrival at the port of landing, and shall be marked with the letters $\frac{W.\ A.\ E.}{C.}$ if landed at Fremantle and $\frac{W.\ A.\ E.}{A.}$ if landed at Albany, and numbered, commencing at No. 1 for each port and proceeding in numerical order according as the packages are landed and entered; they shall then be forwarded, under bond, to the exhibition building, where invoices, in duplicate, must be presented to the customs officer, giving full description of the goods and the market values at the port of shipment, and where the goods must be unpacked in the presence of the customs officer, who will compare the goods with invoices and otherwise examine them as may be required by the customs act; and after the goods have been checked with such invoices, a copy shall be retained by the customs officer until the close of the exhibition. To facilitate examination, foreign invoices should, when practicable, be made out in the English language, and in no case will goods be allowed to be unpacked until invoices in duplicate have been produced to the customs officer.

the returns for the eight months of this year ending August 31 are 637,069 ounces, worth £2,420,862 ($11,781,024). The total output to date is 2,279,689 ounces, or 69 tons 6 cwt. 2 quarters and 25 pounds (avoirdupois) of gold, valued at £8,662,519 ($42,156,148). It is estimated that the yield for 1898 will be fully 1,000,000 ounces.

Western Australia has attained the leading position as a gold producer in Australasia, and, as her great auriferous resources are further developed and better gold-saving methods are adopted, she anticipates taking the first place among the gold-producing countries of the world.

Coal.—Large areas of carboniferous country have been discovered in the colony, the principal of which, up to the present, are situated about 25 miles east of Bunbury and connected by a branch line with the Southwestern Railway. The coal has been tested, with highly satisfactory results.

Timber.—There are over 20,000,000 acres of forest land in Western Australia, or between 30,000 and 40,000 square miles—the area of Great Britain. The matured and marketable timber in these forests is estimated to be from 60,000,000 to 70,000,000 loads, valued at £120,000,000 ($583,980,000). Jarrah, the paving wood par excellence, occupies an area of some 8,000,000 acres, while karri, only second in importance and value, covers 1,200,000 acres.

Agriculture.—Western Australia contains millions of acres of land suitable for cultivation. The following returns, recently issued by the agricultural department, show the productiveness of the soil. Wheat averaged, in 1897, 10.44, barley 13.63, and oats 17.44 bushels to the acre; while potatoes gave 3 tons 15 cwts. to the acre. Some of the farms have been cultivated for many years without any dressing beyond ordinary stable manure. The area of arable land for 1897 was 65.67 per cent greater than that of 1896, while the expansion of agriculture this year promises a still larger percentage over 1897. The rainfall for 100 miles or more from the coast is sufficiently large and constant to insure successful agricultural operations; so that for thirty years or more, while the seasons have varied, a failure has not been known. Large areas of land may be cleared at a comparatively small cost; but, in most instances, as in some of the lands of the southwest division, the heavier the cost of clearing, the more valuable the soil.

Fruit and vegetables.—The possibilities of fruit culture in the coastal lands of Western Australia are practically unlimited. All kinds of extra tropical fruits can be grown in abundance—grapes, oranges, kernel fruits, and stone fruits particularly. There are, at a low estimate, 5,000 square miles of land, omitting unsuitable portions, favorable to grape cultivation; while the areas suited to orchards are as large as they are varied. Vegetables can be grown in the neighborhood of the coastal towns and in the alluvial soils of the river banks to a degree that is almost incredible.

Pastoral lands.—There are extensive areas suited to the production of stock, especially in the northern districts of the colony. But efforts are being made to encourage this industry in the neighborhood of the gold fields, where, notwithstanding the small average rainfall, there are many thousands of acres of land suitable for the purpose. During the past ten years the number of horses, cattle, sheep, and pigs have increased from 50 to 200 per cent.

Climate and population.—The climate varies according to the latitude. In the southwest it is temperate and comparatively cold; in the east and north, it is much hotter, but the atmosphere is dry. The population has increased fourfold in the past ten years, and now numbers over 170,000.

ACTIVITY OF AMERICAN CONSULS.

Under date of September 27, Consul Halstead sends from Birmingham the following clipping from the London Daily Mail:

ALERT AMERICAN CONSULS.

To the Editor of the Daily Mail:

Referring to your special article re our falling trade, in your issue of September 14, an incident which has occurred in our own experience during the last few days may serve to point a moral and adorn the tale.

We have recently opened in Plymouth, in connection with the Plymouth Gas Company, a showroom for gas stoves and fittings. The other day the American consul called and inspected our goods carefully, asked for lists, and then said that he believed his people could supply better value, and that he would write to various makers of similar appliances in the States and suggest their shipping a quantity of goods to compete with us.

One can not fail to notice the admirable business promptitude of American consuls, who are so alert that within a few weeks of the opening of a new establishment they pay a visit, and immediately report to their countrymen new openings that are arising in countries where they are located. How many of our consuls would take such steps as these? Possibly the solution is to be found in commercial attachés to the consulates. Certainly something should be done to keep home manufacturers as much abreast of foreigners and as well informed on foreign openings as our American cousins are kept by their alert consuls.

E. W. T. RICHMOND.

Consul Halstead also transmits, under date of September 26, a clipping from the Birmingham Daily Gazette, quoting, as an instance of the energy of the United States consular service, the action of Mr. Halstead in reporting an application he had received for particulars as to the manufacturers of steel tubes in that city.* The reference to a trade trust, in the latter part of the report, is assumed by the writer of the article to mean the Federal Steel Company, recently organized in the United States. Mr. Halstead says:

To anyone with full knowledge of trade affairs, there would have been no vagueness in my reference to a trade trust. The leading manufacturers in the United States of bicycles and small, seamless tubes have formed a combination and have put up the prices of tubes about 40 per cent, and at present are endeavoring to hold, by cable, several American purchasers who are here with the intention of buying their supply of tubes for next season in this market. That their hands are stayed, temporarily at least, by cable inducements, is indicated by the fact that, while inquiries have been made at this consulate for tariff figures and sample forms of invoice declarations, no tubes have been shipped.

---

* See CONSULAR REPORTS No. 217 (October, 1898), p. 218.

MOUNTAIN WATER COURSES AS INDUSTRIAL AIDS.

Consul Monaghan, of Chemnitz, commenting, under date of September 27, 1898, upon Germany's desire to utilize every means of industrial development, quotes the following from a lecture delivered at a congress of physicists at Düsseldorf:

In recent times, two factors have attracted special attention to mountain streams and their practical value. Now that all navigable rivers in Germany have been regulated, their high waters, once fraught with deplorable consequences to the inhabitants of low lands, practically confined, the question has arisen how far the courses of streams in the mountainous districts may be utilized for industrial purposes. There has been a marked increase in the value of water power since it has been proved that it can be made available by electrical transmission for works at long distances. The electrical exposition of Frankfort in 1891 showed that 75 per cent of the power found at a river could be carried a distance of 177 kilometers (110 miles). At that time, the cost of the experiment was too high to make it practicable. Since then, many methods of transferring the power 20 to 30 miles have been made profitable. Inasmuch as the danger due to the movements of large volumes of water in the mountains must first be done away with, the employment of such methods has been restricted hitherto to plants where the lowest water level of the rivers was sufficient. There will be vast progress in utilizing water power as soon as this difficulty is overcome—*i. e.*, the waters of the mountains will be utilized equally during the whole year.

The dangers hitherto inseparable from waters in the hills can be scientifically controlled. One has only to construct reservoirs large and secure enough to contain easily more than the largest probable amount and to give it off in the dry seasons in the required quantities. How far such reservoirs endanger inhabitants of the valleys, is a question much more important than all those concerned with industrial or agricultural development. Only after the most careful scientific investigation by the country's best engineers, should the basins be built or the valleys dammed. The appalling accidents like the Johnstown disaster and the more recent one in France have prejudiced the public mind. Dams do not, however, burst when properly built; and to build dams properly is no harder, nor half as hard, as to swing bridges across broad spans of rivers and guarantee them against storms. Water volumes may be estimated to a maximum; winds and storms, with free play of the elements in wide areas of space, never.

The advantages of storing up the water may be summarized as follows: Creation of a uniform water power for the factories in the valley, and inducements to increase said industries; distribution of power by electrical transmission; a higher water level in the streams, even in the warm summer months, and a decrease of their impurities; decrease in the liability of the rivers to freeze by the drawing off of comparatively warm water, as the layers of water in a reservoir are rarely less than 5° C.; improvement of the water supply for cities and irrigation of barren lands; decrease in the liability of floods and the damages done by them; decrease of the desire on the part of the inhabitants to collect in large towns; beautifying the landscapes, developing fisheries, water and ice sports, etc., and improvement of means of transportation.

NOTES.

Imports of Hogs at Marseilles.—Consul Skinner writes from Marseilles, October 6, 1898:

Some questions recently sent to me from Nebraska on the subject of live-hog importations into France having been referred by me to Henri Conte, of No. 8 rue Colbert, a Marseilles cattle dealer's agent, for reply, I submit a translation of his letter, which fully covers all points:

Since the arrival of some live hogs from Servia and Asia Minor about three years ago, none have been received at this port. The importation of foreign hogs is authorized on payment at the custom-house of 8 francs ($1.544) per 100 kilograms (220.46 pounds) live weight and supplementary charges as follows, per head:

	Francs.	Cents.
Cost of landing	0.25 =	4.8
Statistics	.15 =	2.8
Sanitary inspection	.20 =	3.8
Octroi	.05 =	0.96
Carriage, if hogs are big and fleshy	1.00 =	19.3
Commission and credit	2.00 =	38.6

The octroi duty is paid by the buyer. Sales are made on live weight after the hogs have gone twenty-four hours without food. The prices being actually paid for good French hogs run about 95 francs ($18.33) for 100 kilograms (220.46 pounds).

Imported hogs must arrive with a certificate of condition from a veterinary surgeon of the place of origin, and a certificate issued by the sanitary service of the point of embarkation, stating that no epidemics prevail in the place from which the consignment comes. The last-named certificate must be legalized by the French consul at the port of embarkation, or, if none exists, by competent local authority.

Foreign hogs accepted by the veterinary examiners of the French Government suffer no discrimination when they pass the required formalities.

Notes from Russia.—Under date of September 30, 1898, Consul Smith, of Moscow, sends the following:

Fair at Nizhni Novgorod.—Business in cotton goods with Central Asia this year has not been very brisk. This is attributed to extensive purchases made during last year and the prevailing low prices. The output of manufactured goods to Persia, however, has considerably increased. The prices for bales of cotton were, for medium, 7.95 to 8.05 rubles ($3.95 to $4). Very little cotton was put into the market, and the trade was chiefly in last year's remnants. It is reported that wool has been bought in Orenbourg for the cloth mills

in Simbirsk and Sizean, at 6.20 rubles ($3.10) washed and at 2.90 to 3 rubles ($1.45 to $1.50) unwashed. Orenbourg hides (camel) were sold at 6.25 to 6.50 rubles ($3.12½ to $3.25); salted, 5.70 to 6 rubles ($2.85 to $3).

New cotton factory.—A cotton spinning, weaving, and dyeing works, to be called the Caspian Manufacturing Company, is to be constructed in Dagestan, near the town of Petroffsk. A concession has been granted to a firm with a capital of 3,000,000 rubles ($1,500,000), divided into 16,000 shares. The offices of the company will be in St. Petersburg.

Waterworks and sewerage.—A company has been formed in St. Petersburg for the purpose of supplying a system of sewerage and of improving the water supply. The capital is to be $2,250,000.

Import of thoroughbred sheep.—According to the report of a southern journal, a large stock of sheep is to be purchased from England for the provinces of Charkoff and Bogodoochoff. The estimated cost of each animal, delivered in Charkoff, is about $70. The Minister of Agriculture has contributed some $2,500 towards the purchases.

Railways in Russia.—The following, dated Moscow, September 30, has been received from Consul Smith:

As is generally known, a commission has been sent along the route of the Siberian Railway for the purpose of deciding the question of increasing the traffic capabilities of the road. A meeting was held at Tomsk and the journal Siberian Life says that it has been decided to increase the gauge. The traffic capacity is to be increased to enable seven sets of trains to be run every twenty-four hours, instead of three, as at the present time. It has also been noted that an increase of rolling stock, cars, platforms, etc., will be necessary. More powerful engines than the so-called six pair or six-axled engines in use at present will be obtained. The estimated cost of all the above-projected improvements is about 16,000,000 rubles ($8,000,000).

A general reduction in railway passenger fares is to be shortly made in Russia, which will involve changing the tickets now issued. This will cause a very large outlay; to the St. Petersburg-Warsaw Railway alone, this change of tickets will mean an expense of over $17,000.

Electric Roads in Rheims.—Consul Prickitt writes from Rheims, September 29, 1898:

The passenger railroads of this city, which are now being operated by horsepower, are about to be changed to the electric-trolley system.

This contemplated change has not yet been made public, but I understand that it will be published in about a fortnight. The city railroads are operated by the Compagnie de Tramways de Reims, a Belgian company. The franchise of this company has a long time yet to run, and it has, therefore, an entire monopoly of the street-railroad passenger traffic. The company having determined to change the motive power, and the city having given it permission to do so, it occurred to me that contractors and furnishers of material for electric roads in the United States, if they were informed of this change, might have an opportunity to compete.

All propositions and inquiries should be addressed to La Compagnie de Tramways de Reims, Sharbeck, Brussels, Belgium.

American Furniture in England.—The following, bearing date of Birmingham, September 22, 1898, has been received from Consul Halstead:

A representative of a firm of general American merchants has just closed the stock room which he had open during three weeks for the fall trade, in the Grand Hotel, of this city. He has had a very successful trade in articles of American manufacture. One of the articles for which he found a ready sale was a little desk, ornamental and appropriate for parlor and ladies' boudoir use. The agent said these were sold with great ease, but he complained that there was a good deal of loss by bad packing. In packing these little desks for shipment, they are wrapped in paper, and it frequently happens that they need another twenty-four hours in drying, for a piece of paper sticking to the varnish, though it covers only a quarter of a square inch of surface, ruins the whole article.

This agent has had a large sale of American broom handles. He states, however, that he could have disposed of many more if the ends had been "turned in," the favorite style for broom handles in this country. His firm works along the line of least resistance, and having once succeeded in inducing an American manufacturer to make broom handles exactly like those of English manufacture, and having found them, on receipt, to have been turned in a rough and slovenly manner, it simply sent them back to the United States and has made no further effort in that direction.

Opening for Stamped-Steel Ceilings in England.—Consul Halstead writes from Birmingham, September 23, 1898:

It is my belief that a sale could be developed here for American ornamental stamped-steel ceilings and kindred stampings, now used

so generally in the United States as a substitute for plaster for ceilings and walls.

If some American manufacturer of these steel stampings will send me catalogues and approximate prices, I will place them in the hands of an enterprising English architect, who has agreed to seek an opportunity for experimental use. Recently, he was putting in a fine glass front and generally refitting and modernizing a store in an old rat trap of a building, and I suggested to him the advantage there would have been in using stamped-steel work for the walls and ceilings.

I have no doubt but that these steel stampings would meet with the approval of both insurance and fire authorities here.

Complaints of American Export Methods.—Consul-General Cole writes from Dresden, October 7, 1898:

While American manufacturers complain of the difficulties in introducing their goods into Germany, I am inclined to think some of our people at least do not pay sufficient attention to promptness in executing orders they receive, or care in making shipments to insure their reception at destination within a reasonable time. Two complaints that reached me this morning well illustrate the trouble: An order for machinery given early in June last to an Eastern manufacturing company has not been received, although sight draft with invoice attached was paid in August; I have seen invoice from an Ohio tool company, dated June 3, 1898, the sight draft for which was paid August 8 last, but up to October 7, there are no tidings of the goods. These delays are very provoking to the purchaser or consignee, particularly after he has long ago paid for the property, and, unless corrected, will have serious effect on American trade in Germany.

Provincial Exposition at Ghent.—Consul Morris, of Ghent, on September 16, 1898, writes:

I have to call attention to the provincial exposition of East Flanders, which will be held at Ghent during the summer of 1899, being opened June 14. While the principal exhibits will naturally be made by residents of the province, there will be a department for foreign exhibitors. There will be exhibits in fine arts, industrial and liberal arts, hygienic and life-saving apparatus, instruction and science, literature (Flemish and French), woman's work, alimentation, horticulture, agriculture, fruit-tree culture and pomology, apiculture; lighting, heating, and ventilating apparatus; sporting goods, military arts, export trade, and colonial products. The exposition will

furnish the best opportunity ever offered to introduce manufactures to the markets of Ghent and the two Flanders, and is worthy the attention of American exporters. All inquiries should be addressed to the executive committee of the exposition, 47 Boulevard Leópold, Ghent, Belgium. I forward herewith by the same mail a number of copies of the prospectus and official regulations.*

Ballooning in Switzerland.—Consul-General DuBois, of St. Gall, writes, under date of October 6, 1898:

On May 12, 1898, I reported to the Department† that Capt. C. Spelterini, of Zurich, in company with some Swiss scientists, would make an attempt to cross the high Alps in a balloon. On the 3d day of October, 1898, the attempt was made at Sitten, in the Canton of Wallis. While the wind currents were unfavorable, the journey will always take high rank among aërial navigating enterprises, both for boldness and important results. The plan of the aëronauts was to descend in the Upper Rhine Valley, between Sargans and Lake Constance. The descent was actually made in France, near Dijon, the ship having been in the air six hours, during which time it traveled 180 miles, or at the rate of 30 miles an hour. At one time the air ship reached an altitude of 19,000 feet; the thermometer (Celsius) stood at 21° freezing, and the cold was so intense that the working of the scientific instruments was for a time suspended. The landing was made through a heavy fog, and, while quite difficult, it was secured without any serious injury to persons or instruments.

Import of Plants Prohibited in New Zealand.—Consul Dillingham sends from Auckland, September 6, 1898, copy of a proclamation by the governor of New Zealand, as follows:

Whereas it has been made to appear to my satisfaction that considerable quantities of fruit trees and plants infested with various species of scale insects have been and are still imported into New Zealand, to the danger and detriment of the fruit plantations of this colony; and

Whereas it is expedient to prohibit the introduction of such fruit trees and plants to this colony:

Now, therefore, I, Uchter John Mark, Earl of Ranfurly, the governor of the colony of New Zealand, by virtue of the power and authority conferred upon me by the third section of "the orchard and garden pests act, 1896" (hereinafter termed "the said act"), do hereby proclaim and declare that the introduction into New Zealand of any fruit or other trees or plants (including cuttings, buds, or any other portion of a plant except fruit) infested with any species of scale insect (coccid), or in or on which there are traces that any such pest is or has been present in any form

---

* Filed for reference in the Bureau of Foreign Commerce, Department of State.

† See CONSULAR REPORTS No. 215 (August, 1898), p. 605.

or stage of development, is hereby absolutely prohibited; and if any fruit tree, plant, or portion thereof respectively hereby prohibited is imported into this colony, then such trees or plants, and the packages containing the same, shall be dealt with in the manner provided by section 6 of the said act, with respect to plants and other things unlawfully introduced to the colony; and for the purposes of the said act I hereby appoint the ports of Auckland and Wellington to be the only ports of entry for plants, as defined by the said act.

Cheap Labor in Japan.—Consul-General Gowey writes from Yokohama, September 18, 1898:

From a recent issue of the Japan Times, a daily newspaper edited and published in Tokyo by Japanese, I take the following information relative to cheap labor in Japan:

A member of the Osaka Watch Company says that the wages paid to the workers in that factory are certainly much lower than those paid in European or American factories; yet, despite this fact, the business of watch making is not a paying one in Japan. Lack of skill among the mechanics is one of the reasons given for this state of affairs. The employment of men at 40 to 50 sen (20 to 25 cents in American money) per diem would appear a much more profitable method than paying workmen $3 per diem, and such are the wages said to be received by Western watchmakers; but against this it may be said that ten of the latter can easily do work which would require from seventy to eighty Japanese.

The Times goes on to say:

We are apt to think that, wages in Japan being very low at present, foreigners will take advantage of the cheap labor and make very profitable investments of their capital when the revised treaties are put into practice. It is true that wages are low, counted by yens and sens; but when we consider the nature of the labor, the wages will be found to be far from low.

Proposed Cement Trust in Japan.—Consul-General Gowey writes from Yokohama, August 31, 1898:

As indicative of some new features of the course of trade in Japan, I inclose a clipping from the Japan Mail of yesterday, concerning the proposed organization of a trust by the leading cement companies of Japan:

THE CEMENT COMPANIES.

Japan, it seems, will not have to wait long for her era of "trusts," "railway kings," and the other outgrowths of modern commerce. We have seen how the cotton-spinning companies are combining to form a monster association for the purpose of reducing production and thus maintaining prices. It appears that the cement firms are about to adopt the same policy. There are ten cement firms in Japan. At one time they did a fine business, when railway building, harbor making, and other enterprises were in a state of feverish activity after the war. But they have felt the recent depression which affects all branches of business, and have come to the conclusion that their only plan is to combine for the purpose of putting an end to competition among themselves. Nine of the companies are said to have agreed to this course.

Electric Lamps in Kobé.—Consul Lyon writes from Hiogo, September 28, 1898, that he has received a letter from K. Ikeda, president of the Kobé Electric Light Company at that port, in answer to the consul's inquiries relative to electric-light supplies.*

The company, the letter states, formerly used only the Edison lamp, but in 1894 changed to English and German lamps in consequence of their being cheaper; but it recognizes the superiority of the American or Edison lamp, and says that as it is desirable to use lamps requiring the least amount of power, machinery for testing lamps is now being put up, which when done may disclose that it should discard the cheaper English and German lamps and again use the Edison. The prices are given as follows: Lamps of 5, 8, 10, 16, and 24 candles, 32 sen (16 cents) apiece; 32 and 50 candles, 50 sen (25 cents)—this being the cost on delivery at Kobé.

Proposed Customs Union in South Africa.—Consul-General Stowe sends from Cape Town, under date of August 19, 1898, a copy of the bill to provide for the entry of the colony of Natal into a South African customs union. This, says Mr. Stowe, is the first step towards the establishment of a customs union, to be entered into by the Orange Free State, Natal, Rhodesia, Cape Colony, and, it is hoped, the South African Republic. The third schedule of the bill prohibits the entrance of all articles of foreign manufacture bearing the name of manufacturers resident in the United Kingdom; and the consul-general calls attention to this, because, he says, assumed names and addresses are used on nearly all lines packed in the colony—perfumes with French names, soothing sirups with American addresses, etc. The proposed tariff, he adds, collects a duty of 20 per cent on all proprietary preparations. The full text of the bill is filed for reference in the Bureau of Foreign Commerce.

Immigration and Postage for South Africa.—Consul-General Stowe writes from Cape Town, September 17, 1898:

That there are many Americans in South Africa who should never have come is evident. Many unfortunates are stranded here without employment. I would advise Americans to stay away. Gold and diamonds are not for the many; all avocations are full; living is high; to go "up country" is like jumping from the pan into the fire, for the conditions there are not encouraging.

---

*This report was made in answer to inquiries by the United States Export Association, of New York, to whom the information has been forwarded.

I would call attention to the fact that many correspondents in the United States fail to attach sufficient postage stamps to their letters, and that this consulate is at quite an expense on the arrival of each weekly mail.

Finances of Uruguay.—Consul Swalm writes from Montevideo, August 31, 1898, that the public debt, bonded and floating, amounts to $140,000,000. The appropriations for 1898–99 are: Legislative power, $341,114; Presidency, $64,618; Ministry of Foreign Affairs, $149,089; Ministry of Government, $2,721,659; Ministry of Finance, $961,040; Ministry of Interior, $1,127,140; Ministry of War and Marine, $1,921,953; public debt, $5,329,662; railway guaranties, $884,770; pensions, $1,417,378; various, $524,679; total, $15,434,003. This makes the per capita tax $18.24. The Republic faithfully maintains its credit and has not repudiated a dollar of its debt. Taxes are levied on exports of animals and animal products, on land (the latter being very low), on notes, checks, etc. Licenses must be obtained for all kinds of business. The tobacco tax is levied under a system modeled on that of the United States, save that each cigar has a 2-mill stamp wrapped about it. Matches (wax) pay 5 mills on each box of 50. The city of Montevideo has bonds outstanding for $6,000,000; it holds as an asset the electric-light works, which yield a good revenue.

Mechanics' Bank in Venezuela.—Under date of September 15, 1898, Consul Plumacher, of Maracaibo, sends translation of a contract for the establishment of a mechanics' bank, which is summarized as follows:

The contractor binds himself to establish in this city a loan association, with the object of building houses in Caracas and other cities, advancing money and materials, secured by mortgage guaranty on the property, to be gradually repaid by the rents, so that in time the builder will acquire the absolute proprietorship of the house.

The Mechanics' Bank will make loans at the rate of 70 per cent in materials for construction and 30 per cent in cash for payment of workmen, and will take a mortgage on the building, receiving 12 per cent in monthly payments. This 12 per cent is to be applied in the following manner: Six per cent interest on the capital employed in the work, 4 per cent for refunding of capital, 2 per cent for the current expenses of the bank.

The concession will last fifteen years, and the bank is to be opened within one year after approval of the contract. The bank, as well as the houses it assists in building, until the mortgages are canceled, are to be exempted from municipal taxes.

Mr. Plumacher adds that he considers the enterprise a good investment.

Concession for Making Porcelain in Venezuela.—Consul Plumacher transmits from Maracaibo, under date of September 20, 1898, translation of a contract between the Minister of Agriculture, Industry, and Commerce and Marquis Gino Incontri, an Italian subject, for the manufacture of porcelain wares. The principal features of the contract are:

The contractor is to establish, within eighteen months, one or more factories of porcelain ware, but not of the sort already manufactured in the country. The Government is not to make a similar grant for ten years to any other person. Congress is to be asked not to reduce the present duties on porcelain wares.

Materials for construction, machinery, etc., for the factory shall be exempt from duty, and the goods of the company shall not be taxed during the term of the contract.

Land (12 acres) is to be granted free to the company for the construction of the factories, and 62 acres for the raw material.

The company is to pay into the treasury one year after the execution of this contract 10 per cent net of the yearly profits, and will deposit in one of the banks of Venezuela 25,000 bolivars ($4,825) in gold or in Venezuelan or Italian bonds.

If the factories cease work for six consecutive months through the fault of the company, it must pay a fine of 20,000 bolivars ($3,860); should they remain idle another six months, this contract will be annulled.

Government Sugar Factory in Antigua.—Consul Halstead writes from Birmingham, September 24, 1898, that, according to the Daily Mail, of London, the British Colonial Office has resolved upon the erection of a sugar factory in Antigua, which will be central for British West Indian possessions where sugar is grown. This factory is to be under Government guaranty of interest, and the details are so far completed that they will be ready for publication in another week. A Glasgow firm has obtained a contract for the machinery. "This measure," states the Mail, "forms part of the scheme for the relief and furtherance of the sugar industry in the West Indies, grants in aid of which were voted in Parliament a short time ago." Mr. Halstead adds that this effort on the part of the Colonial Office is intended as an offset to the aid, in the form of bounties, given beet-sugar producers by continental governments, enabling them to put sugar on the English market at a figure with which the West Indian interests could not compete.

Financial Conditions in Guadeloupe.—Consul Aymé sends the following from Guadeloupe, under date of September 24, 1898:

The financial crisis through which the colony is now passing is attributable to many causes, but can be traced immediately to a short time ago. In 1892, 1893, and 1894, the exports and imports

balanced. In 1894–95, the sugar crop fell off 25 per cent, and at the same time the price of sugar diminished. The quantity and value of the imports, however, increased. A curious state of affairs ensued. Bank drafts remained nominally at 7 per cent premium, but on the market drafts readily brought 30 and 35 per cent premium. The bank consequently had to suspend issuing drafts. Early in 1897, it sold some drafts at 15 per cent premium, but later again suspended exchange operations. In April, the rate of exchange was lowered to 26 per cent.* For a short time there was no restriction on the sale of drafts. Now, the bank sells only on dates of sailing of the English Royal Mail boats. Business is stagnant and feverish. Merchants are using every effort to collect money, and the price of provisions remains very high.

United States Shoes in Guadeloupe.—Consul Aymé, of Guadeloupe, under date of September 17, 1898, says:

A merchant here has received from the United States a large sample case of boots and shoes (men's, women's, and children's), and is doing remarkably well with them. His orders are a great surprise to him. The samples are of excellent material and workmanship, light, and stylish in appearance. It is to be hoped that the orders will be filled with shoes of the same grade as the samples, as that will insure a steady trade for the future. These goods can be sold by the importer at an average price of $1.81 a pair. The duties average 30 cents a pair and freight 3 cents. The importer's profit must also be calculated. The average retail price will be about $2.50.

As all boots and shoes have heretofore come from France, I am glad to chronicle this seemingly promising competition of American goods.

Haitian Duty on Soap.—Vice-Consul-General Terres sends from Port au Prince, October 7, 1898, translation of a law recently passed by the Legislature, as follows:

ARTICLE 1. Soap of all quality shall pay 50 cents per 100 pounds, without prejudice to the additional duties.

ART. 2. The surtax of 25 per cent provided by the law of December 16, 1897, shall not be deducted on soap.

ART. 3. The present law, which abrogates all laws and provisions of laws which are contrary to it, shall be executed at the diligence of the Secretaries of State for Finance and for Commerce.

This, says Mr. Terres, virtually reduces the duties on soap one-half.

---

*See CONSULAR REPORTS No. 214 (July, 1898), p. 402.

Japanese Camphor Trade.—Under date of September 17, 1898, Consul-General Gowey sends from Yokohama a clipping from the Japan Herald of even date, to the effect that the market quotations of camphor are at present very low, which is due to the large shipments from Formosa to London, Bombay, and Germany direct. There are four camphor refineries in Japan, viz, the Nippon Camphor Company, the Sumitomo Camphor Manufactory, the Fukiai Camphor Refinery, and a factory belonging to Messrs. Lucas & Co., in Kobé, which is the only port in Japan engaged in that line of trade, camphor being refined there to the amount of 1,500,000 pounds this year, valued at 6,500,000 yen ($3,250,000).

Tobacco in China.—Consul-General Goodnow writes from Shanghai, under date of August 31, 1898, in answer to Virginia correspondents (to whom the original letters have been forwarded) substantially as follows:

Very little leaf tobacco is imported into China. In 1897, Canton imported 323,733 pounds, valued at $16,912 (United States gold); Shanghai imported 189,600 pounds, valued at $18,943 gold. The only firm I know of here that buys leaf tobacco is the American Cigarette Company.

Rice Crop of Japan.—Consul-General Gowey, writing from Yokohama under date of September 17, 1898, says that the rice crop of Japan for 1898 is estimated at 45,760,000 koku (7,596,160 tons, of 2,000 pounds each), an increase of 38.69 per cent as compared with that of the preceding year and of 18.68 per cent as compared with the average crop. The full text of the report, giving the increase by districts and a statement of the crops for the last eleven years, has been transmitted to the Department of Agriculture.

Good Wheat Crop of France.—Commercial Agent Atwell, of Roubaix, under date of October 8, 1898, says that the Minister of Agriculture has just published the approximate yield of wheat, estimated at 131,050,222 hectoliters (371,789,479.814 bushels). The crop surpasses by 10,000,000 hectoliters (28,370,000 bushels) that of the best years of late, and nothing like it has been known since 1874. The grain, also, is of superior quality, the mean weight being 77 kilograms (169.7 pounds) to the hectoliter (2.837 bushels).

Labor in North France.—Commercial Agent Atwell, of Roubaix, under date of October 3, 1898, says that in Lille 6 per cent of the bakers are idle; the working-day in the linen factories has been shortened. One-third of the weavers of Haspres are without work, and the same proportion of coopers at Dunkirk. Metal workers and boiler makers are busy. Twelve per cent of the masons at Dunkirk are idle.

At Maubeuge, bread has diminished in price 1 cent on 6½ pounds.

Increase of Imports from Switzerland.—Consul-General DuBois writes from St. Gall, September 21, 1898, that in August, 1898, Swiss exports to the United States amounted to $568,715, an increase of $255,903 over August, 1897. These are the first two Augusts under the new tariff, and the increase has taken place in spite of the war and the assertions of exporters here that the action of the New York custom-house would greatly reduce shipments and thus curtail the revenue.

Value of Railways in Sweden.—Consul-General Winslow, of Stockholm, under date of September 22, 1898, says that at the close of 1897, the Government railroads (not private corporations), together with their real and personal property, were valued at $85,600,000.

Gold Shipments from Cape Colony.—Consul Hopley, writing from Southampton, September 20, 1898, notes the arrival of heavy shipments of gold from the Cape, as follows:

Steamer.	Arrival.	Value.	
Scot	September 10	£278,281	$1,354,254
Norman	September 23	281,535	1,370,090
Hawarden Castle	September 30	517,980	2,520,749
Total		1,077,796	5,245,093

Trade Conditions in the Transvaal.—Consul-General Stowe writes from Cape Town, September 8, 1898, that there is a decrease of trade in the South African Republic, the returns for July showing a 25 per cent reduction. For the year ending December 31, 1897, the value of goods entering the ports of Cape Colony for removal to the South African Republic was £4,357,547 ($21,206,002), against £5,939,643 ($28,895,273) in 1896.

Iron Works in New South Wales.—Consul Goding writes from Newcastle, August 16, 1898, that there is a project to establish iron works in New South Wales capable of manufacturing steel rails. Offers will be received from people having command of considerable capital. While the quality of iron ore, adds Mr. Goding, is not the best, those interested are determined to utilize it in the manufacture of heavy steel rails.

Postal Savings Bank in Java.—Under date of September 8, 1898, Consul Everett, of Batavia, writes that postal savings banks were opened on July 1, 1898. The results, so far, have been encouraging. The rate of interest is 2.4 per cent, and the regulations are modeled on those of the British postal savings banks, modified to suit local conditions. The full text of the report has been transmitted to the Post-Office Department.

Exemptions from Duty in the Netherlands.—Minister Newel writes from The Hague, under date of Octobor 18, 1898, that by royal order dated October 7, 1898, appearing in the Official Gazette of the 18th, exemption from duty will be accorded on vinegar and acid of wood (pyroligneous acid) required in factories for the making of lucifer matches.

Vancouver-Vladivostock Steamship Service.—Commercial Agent Beutelspacher, writing from Moncton, under date of October 19, 1898, notes that the Canadian Pacific Railway is to place a line of steamships on the Pacific Ocean between Vancouver and Vladivostock. The Trans-Siberian Railway, adds Mr. Beutelspacher, will open an immense territory with abundant resources. Canadian manufacturers are hoping to obtain a share in the trade of the East.

Amalgamation of Ontario Vinegar Manufacturers.—Consul Culver transmits from London, under date of October 27, 1898, a newspaper clipping to the effect that the principal vinegar factories in Ontario are to be amalgamated under one management, in Toronto. The company is to be capitalized at $500,000. It is expected that a very large saving in operating expenses and consequently in the cost of the product will be effected.

Consular Reports Transmitted to Other Departments.—The following reports from consular officers (originals or copies) have been transmitted since the date of the last report to other Departments for publication or for other action thereon:

Consular officer reporting.	Date.	Subject.	Department to which referred.
J. G. Stowe, Cape Town.....	Sept. 3, 1898	Market rates of agricultural produce.	Department of Agriculture.
E. Schneegans, Saigon.....	Aug. 2, 1898	Rice market.....	Do.
Do.....	Aug. 16, 1898	.....do.....	Do.
Do.....	Aug. 30, 1898	Rice report.....	Do.
J. E. Hopley, Southampton..	Sept. 23, 1898	Corn trade.....	Do.
Frank Dillingham, Auckland.	Aug. 6, 1898	Agricultural statistics.....	Do.
M. A. Twitchell, Kingston (Canada).	Sept. 30, 1898	Agricultural report.....	Do.
J. H. Grout, jr., Malta.....	Sept. 19, 1898	Maltese viticulture.....	Do.
Do.....	.....do	Movements of British Mediterranean fleet.	Navy Department.
H. W. Brush, Clifton.....	Oct. 27, 1898	Canadian wheat.....	Department of Agriculture.
Do.....	.....do	Canadian banking.....	Treasury Department.
J. N. Ruffin, Asuncion.....	Sept. 14, 1898	Commercial list of Paraguay.	Bureau of the American Republics.
Thomas Smith, Moscow.....	Sept. 30, 1898	Education in Russia.....	Bureau of Education.
Marshal Halstead, Birmingham.	Oct. 4, 1898	The sanitary congress.....	Department of Agriculture. Marine-Hospital Service. War Department.
W. H. H. Graham, Winnipeg.	Oct. 15, 1898	Crop report.....	Department of Agriculture.
L. S. Hunt, Palmerston.....	Oct. 14, 1898	Fall wheat conditions.....	Do.
E. H. Plumacher, Maracaibo.	.....do	Newspapers published in Venezuela.	Bureau of the American Republics.
J. C. Monaghan, Chemnitz..	Sept. 9, 1898	Women employed in German trade.	Department of Labor.
L. H. Aymé, Guadeloupe...	Sept. 6, 1898	Port of Pointe a Pitre.....	Hydrographic Office.
S. B Everett, Batavia.....	Sept. 8, 1898	Postal savings banks in Java.	Post-Office Department.

FOREIGN REPORTS AND PUBLICATIONS.

American Products in Japan.—A British Foreign Office report (annual series 2189) on the trade of Osaka and Hiogo in 1897 says:

To the English manufacturer, by far the most satisfactory feature in last year's trade was the improvement in the import of metals, machinery, and railway material. The machinery imports in 1897 and 1896, compared, were approximately as follows:

Articles.	1897.		1896.		Remarks.
Spinning and weaving machines.	£414,000	$2,014,731	£260,000	$1,265,290	Practically all British.
Electrical, mining, paper-making, printing, sewing, and other machine tools.	267,000	1,299,356	114,000	554,781	British, 56 per cent; United States, 28 per cent; German, 12 per cent; French, 2 per cent; other countries, 2 per cent.
Steam vessels	202,000	983,033	82,000	399,053	Practically all British.
Locomotive engines and parts.	106,000	515,849	65,000	316,323	United States, 57 per cent; British, 43 per cent.
Steam boilers, engines, and pumps.	61,000	296,856	60,000	291,990	British, 80 per cent; United States, 16 per cent; other countries, 4 per cent.
Watches and fittings	53,000	257,924	65,000	316,323	Swiss, 78 per cent; United States, 13 per cent; German, 6 per cent; French, 2 per cent; British, 1 per cent.
Clocks and parts	24,000	116,796	26,000	126,529	German, 51 per cent; United States, 38 per cent; French, 8 per cent; other countries, 3 per cent.
Parts of railway and other carriages.	18,000	87,597	11,000	535,315	British, 80 per cent; United States, 14 per cent; German, 6 per cent.
Implements for farmers and mechanics.	11,000	535,315	9,000	43,799	British, 75 per cent; United States, 25 per cent.
All other machinery	44,000	214,126	44,000	214,126	Comprising chiefly: Munitions of war, £17,000 ($82,730); scientific and musical instruments, £12,000 ($58,398); fowling pieces and parts, £5,000 ($28,332); field glasses, etc., £1,000 ($4,866); etc.
Total	1,200,000	5,839,800	736,000	3,581,744	

While the figures are approximately correct for this port, the percentages of the articles imported from different countries are calculated on the total figures for the goods imported at all the open ports of Japan, figures showing the country of origin for the goods imported at each open port not being available.

In view of the marked advance of American competition during 1897, the following figures covering the total locomotive-engine imports into all the ports of Japan are attached for purposes of comparison:

Country.	1897.		1896.	
United States	£289,400	$1,408,365	£45,760	$222,691
Great Britain	180,600	878,890	115,940	564,222
Other countries	3,500	17,033	16,500	80,297
Total	473,500	2,304,288	178,200	867,210

In 1897: British, 43 per cent; American, 57 per cent; other countries, nominal. In 1896: British, 65 per cent; American, 26 per cent; other countries, 9 per cent.

Out of the increased locomotive imports of 1897, amounting to £245,300 ($1,192,752), the United States took £193,640 ($942,349); Great Britain, only £64,660 ($313,668); and other countries lost £13,000 ($63,265). Thus the United States secured 75 per cent and Great Britain only 25 per cent of this increase.

In the imports of metals, the principal items were:

Articles.	1897.		1896.	
Rails	£180,000	$875,970	£90,000	$437,985
Bar iron	126,000	613,179	110,000	535,315
Railway materials	104,000	506,116	57,000	277,380
Nails	80,000	389,320	70,000	340,655
Zinc	72,000	350,388	57,000	277,380
Pig iron	60,000	291,990	56,000	272,524
Plate and sheet iron	47,000	228,726	57,000	277,380
Lead	30,000	145,995	44,000	214,126
Galvanized roofing and sheets	27,000	131,396	15,000	72,998
Wire	25,000	121,663	22,000	107,063
Crucible steel	20,000	97,330	25,000	121,663
Tin plates	15,000	72,998	8,000	38,932
Steel ware	13,000	63,265	21,000	102,197
Tin	10,000	48,665	12,000	58,398

Rails were exported from the United States to Japan for the first time in 1896. The development in 1897 deserves attention.

Country.	1897.		1896.	
Great Britain	£163,000	$793,240	£203,000	$987,900
United States	123,500	601,013	37,500	182,494
Belgium	29,000	141,129	9,000	43,798
Germany	17,000	82,723	10,000	48,665
Total	332,500	1,618,105	259,500	1,262,857

In 1896, British rails were four-fifths of all imported; in 1897, they were less than half. There were imported £73,000 ($355,254) more rails in 1897 than in 1896; but British rails fell off by £40,000 ($194,660), while the import of American rails increased by £86,000 ($418,419).

In 1897, for railway material Great Britain had 61½ per cent; United States, 16¼ per cent; Belgium, 13 per cent; Germany, 9¼ per cent. In 1896, Great Brit-

ain had over 77 per cent; Germany, nearly 12 per cent; Belgium, 6 per cent; and the United States, only 5 per cent. Although the railway material is less important than the rails, it is noteworthy that in this, as well as the rails, the United States increased its exports to Japan to over treble the 1896 amount.

Previous to 1897, all the pig iron came from England, but this year about 8 per cent came from America. American pig iron is not so much liked as the English, and what is used is mixed with British pig. The American compares favorably with the English in price. Of bars, some 80 per cent is Belgian and the rest British. Of plates and sheets, about 75 per cent is English and the rest continental. America sends 62 per cent of the wire nails; Germany, 32 per cent; Belgium, 4 per cent; and England, 2 per cent. Wire and telegraph wire comes from England (20 per cent), and the rest from Germany, though America is beginning to compete. Of iron pipes and tubes, about 76 per cent is English, 13 per cent Belgian, and 11 per cent from the United States. The American competition is quite recent and has been pushing the English out in the last few months. Galvanized sheets and roofing is all British. Of other manufactured iron and steel, nearly all is English, though the United States is cutting in and taking something here, something there, that has hitherto come only from Great Britain. England sends 55 per cent of the brass, lead, etc., imported; Germany, 28 per cent; the United States, 10 per cent.

The imports of American kerosene have improved during 1897, and the Russian has decreased.

In the trade of Hiogo alone, imports from Great Britain show an increase of 14 per cent over 1896; German imports are stationary; French have fallen off 27 per cent; but those from the United States have gained 63 per cent. The United States now shares over 13 per cent of the total trade (imports and exports together) of the ports of Hiogo and Osaka. This is noteworthy, as showing the immense strides which American commerce is capable of making on this side of the Pacific.

Trade and Industry of Principal Countries.—A report from the British consul at Stockholm (No. 467, miscellaneous) quotes the following statements from a Swedish statistical publication:

The average annual value of the commerce (imports and exports taken together) of the four greatest trading countries of the world for the periods 1881–1885, 1886–1890, and 1891–1895 was:

Country.	1881–1885.		1886–1890.	
Great Britain and Ireland	£573,888,888	$2,792,830,273	£568,222,222	$2,765,253,443
Germany	306,611,111	1,492,122,972	325,888,888	1,585,939,273
France	318,222,222	1,548,628,443	306,000,000	1,489,149,000
United States	302,333,333	1,471,305,165	301,611,111	1,467,790,472

Country.	1891–1895.	
Great Britain and Ireland	£589,166,666	$2,867,179,580
Germany	352,777,777	1,716,793,051
France	296,833,333	1,444,539,415
United States	347,333,333	1,690,297,565

Thus, during this period, Great Britain's trade has increased by slightly more than 2½ per cent, that of Germany and the United States each by 15 per cent, while the trade of France has steadily declined. The volume of trade has, of course, increased to a much greater degree than is indicated by these figures; but, owing to the almost universal fall in the prices of commodities, the increase in value of exports and imports has been less than might have been expected.

The most striking fact brought into relief by the statistics is the rapidity of Germany's industrial development since the Franco-Prussian war. The sudden increase of her great coal, iron, and iron-ore producing industries, the extension of her railway system, and the quick growth of her foreign trade, have placed her in a much stronger position than she occupied previous to 1870. The standing of Great Britain (considered apart from her colonies) has retrograded in relation to the other great nations within the last twenty-five years. In nearly every important department of industry, her proportional share has much diminished. As to shipping only is the early supremacy fully maintained. Her position, however, when considered in conjunction with her colonies, is very different, as will be seen from the following table, which shows the average annual imports and exports of British colonies and dependencies and the United States of America for the period 1890–1895 and the imports and exports for 1895 of Germany and France:

Country.	Imports.		Exports.		Total.	
Germany	£203,516,666	$990,413,846	£163,866,666	$797,457,130	£367,383,332	$1,787,870,976
France	148,794,444	724,108,162	134,950,000	656,734,175	283,744,444	1,380,842,337
United States	161,350,000	785,209,775	167,544,444	815,355,037	328,894,444	1,600,564,812
British colonies and dependencies	192,488,888	936,747,173	211,761,111	1,030,535,447	404,249,999	1,967,282,620

Thus, the sum of the imports and exports of the British colonies and dependencies exceeds the total amount of the exports and imports of the United States by nearly one-fourth, that of Germany by about one-tenth, and that of France by more than one-third.

The production of iron ore is given as follows:

Country.	1871–1875.	1881–1885.	1886–1890.	1891–1895.
	Tons.	*Tons.*	*Tons.*	*Tons.*
Great Britain and Ireland	16,087,000	17,154,000	14,250,000	12,249,000
Germany	5,262,000	8,557,000	10,183,000	11,679,000
United States	4,532,000	8,516,000	12,988,000	14,288,000
France	2,651,000	3,018,000	2,850,000	3,651,000
Spain	613,000	4,119,000	5,766,000	5,346,000
Other countries	4,181,000	4,578,000	5,467,000	9,068,000
Total	33,326,000	45,942,000	51,504,000	56,281,000

Thus, during the period between 1871–1875 and 1891–1895, the annual production of iron ore in Great Britain is estimated to have decreased from 16,087,000 tons to 12,249,000 tons. Germany's output more than doubled within the same period and that of Spain increased nearly ninefold. The production of the United States has more than tripled. Sweden has also taken an important position as an iron-

ore-producing country. It is noticeable that Great Britain's production has decreased absolutely, and not merely relatively as regards that of other countries.

The average annual output of pig iron is stated in the following table:

Country.	1871–1875.	1881–1885.	1886–1890.	1891–1895.
	Tons.	*Tons.*	*Tons.*	*Tons.*
Great Britain and Ireland	6,562,000	8,227,000	7,883,000	7,361,000
Germany	1,946,000	3,411,000	4,215,000	5,082,000
France	1,265,000	1,899,000	1,693,000	2,006,000
United States	2,284,000	4,370,000	7,193,000	8,263,000
Other countries	2,114,000	2,780,000	3,298,000	4,038,000
Total	14,171,000	20,687,000	24,282,000	26,750,000

During this period, it appears that Great Britain's share in the world's production of pig iron has shrunk from 46.3 per cent to 27.5 per cent; while, on the other hand, the United States increased its proportion from 16.1 per cent to 30.9 per cent. The rapid development of Germany in this line of production is also striking.

The production of coal was:

Country.	1871–1875.	1881–1885.	1886–1890.	1891–1895.
	Tons.	*Tons.*	*Tons.*	*Tons.*
Great Britain and Ireland	126,972,000	161,470,000	172,335,000	184,819,000
Germany	44,680,000	68,630,000	81,228,000	97,008,000
France	15,862,000	20,250,000	22,838,000	26,658,000
United States	45,283,000	94,130,000	125,214,000	160,832,000
Other countries	33,973,000	52,175,000	63,445,000	78,832,000
Total	266,770,000	396,665,000	465,060,000	548,149,000

During the early period, it appears that Great Britain supplied 47 per cent of the world's output of coal, but at the present time only 34 per cent; Germany advanced from 17 per cent to 18 per cent, and the United States from 17 per cent to nearly 30 per cent.

Figures as to the consumption of raw cotton show that since 1870 Great Britain's consumption has increased by one-fourth, and that of the rest of Europe and of the United States has doubled. As to the production of wheat, the United States contributes one-fifth, the British colonies about one-eighth, and Germany less than one-twentieth of the total production. The United States and the British colonies together produce somewhat more than half of the total annual output of gold and nearly half of the annual output of silver in the world. The cattle in British colonies and dependencies outnumber nearly twice those of the United States; the number of horses in British colonies and dependencies is about one-third that in the United States and one-fourth more than that of Germany; and the number of sheep in British colonies is nearly four times that of the United States and eleven times as large as that of Germany.

The percentage of increase of population within the last ten years is stated as follows: British colonies and dependencies, 12 per cent; United States, 24 per cent; Russia, 11 per cent; Germany, 11.95 per cent; France, 0.78 per cent; Great Britain and Ireland, 8.77 per cent.

The development of Russia and the opening of Siberia will probably mean a rapid increase of population in those regions in the near future.

American Manufactures in England.—The British Trade Journal, London, October 1, 1898, referring to an article appearing in a Sheffield paper under the title of the "March of the American," says:

The writer set himself to show in plain detail—mentioning by name various manufacturers and the articles they produce—that the American manufacturer was making rapid strides in supplying the European markets, and more particularly Great Britain. One reason for this was the freedom of the States from trade unions as they operate in England. Another was the remarkable adaptation of the machine tool to every possible purpose and the reduction of manual labor to the irreducible minimum. A third cause was the promptitude and exactitude in making deliveries. Special reference was made to the production of small malleable iron castings, such as are used in railway specialities produced in Sheffield, Birmingham, Manchester, and elsewhere. The writer says that since this article appeared he has had communications from various representatives of large firms in England, all confirming what he stated. One of them wrote: "Our firm would far rather place orders in the British Isles, but we are sorry to say that in these days of keen competition and standoffishness on the part of British manufacturers we can not do so." Another principal of an extensive British manufactory confesses to receiving large quantities of American goods, on account, he says, both of their uniform quality and of the ease with which large deliveries can be made. It seems extraordinary that in this country British firms should have such difficulty in getting all they want made by their countrymen, but there is no denying that complaint is too much heard about home firms delivering large orders in driblets, and frequently after heavy delays. A Sheffield manufacturer having failed to get deliveries from two firms, cabled to the States and had the goods in his warehouse at half a penny per pound less than he could have got them made in England, and actually before the order he had placed in England was delivered to him.

Trade Conditions in Brazil.—Speaking of the visit to Rio de Janeiro of the commissioner of the British Board of Trade, who is engaged in studying commercial conditions in South America, the Brazilian Review (Rio de Janeiro, September 27, 1898) says, in part:

The causes of the falling off of British trade lie principally in the shortcomings of the home manufacturers, who fail to meet the views of consumers in these markets. It must be recollected that the depreciation of the currency in South America has greatly enhanced the cost to local consumers without proportionately raising their earnings and power of purchase. Cheaper goods are in demand, and, if they have a good appearance, even if the quality is not good, they will find easy sale. British manufacturers seem to show obstinacy in adapting themselves to new demands. Take, for example, locomotives. Why is it that all over South America, except on some English lines, American locomotives are used and preferred? Does not this point to some indisputable advantages and superiority in these machines or their greater adaptability to local conditions? Yet our manufacturers insist on imposing their heavy, rigid models, unmindful of the fact that they are losing a most important trade. It ought not to be a very difficult matter to produce a new model on American lines, as good, if not better, if our manufacturers really bend their mind to the matter. There are some branches of trade from which we are

being ousted by sheer impossibility of competing on equal terms. Steel rails, for example, are being placed here by American makers at prices at which competition seems useless in England. American competition is also threatening in the coal trade, and though in that particular branch it may be more difficult, the fact remains that English producers are threatened in the only one of which they were thought to possess a virtual monopoly.

The gradual disappearance of the local British merchant as a distributer of even British goods, is another feature which presents a serious menace to British foreign trade. Until within a few years, the principal importing houses in every port along both coasts were almost exclusively British. To-day, other nationalities, especially German, supersede the British in numbers and often in importance. They now act as distributers of our products in these markets, because they can buy better or cheaper in England than elsewhere; but as soon as the same goods can be substituted by others equally good and cheap of their own manufacture, is it not logical to expect that the substitution will be effected? That foreign manufacturers are quickly approaching our own standards of excellence and price, and in some cases excelling them, there can be no question.

Markets of Paraguay.—The following is from the British Trade Journal, London, October 1, 1898:

English manufacturers are apt to overlook Paraguay, owing to the fact that the apparent amount of its foreign trade is small. This is, in a great measure, the result of the inland position of the country and the import and export trade being done mainly through Argentina or Uruguay, figuring as the commerce of those countries, which appears so much larger at the expense of Paraguay. I would call attention to the following lines of trade:

Sewing machines are in great demand throughout Paraguay, as, indeed, they are in every part of South America I have visited. The cheapest kinds are the most salable, though a considerable number of high-class machines could also be placed. Most of those in the market are of German manufacture.

Stills.—There are a large number of stills in use, the greater part of those imported being of French make. Small sizes are most in demand, capable of distilling from 50 to 200 gallons per day, of a strength of 18° (Cartier). They may be either simple or for continuous (or semicontinuous) distillation, but should be as little complicated as possible. By advertising and pushing their sale, a considerable quantity might be disposed of. There is little wine made in the country or any other liquor than "caña" (white rum).

Chemicals.—For such chemicals as are generally sold by druggists, there is a good demand. In this line English manufacturers seem to secure a fair share; though few local dealers order direct, generally placing their orders in Montevideo or Buenos Ayres. The same remarks apply to surgical instruments and appliances. Mineral waters are in fair demand in Asuncion and the larger towns.

Sugar-making machinery.—A considerable number of portable iron mills, suitable for working with oxen, might be placed. A good deal of sugar (unrefined) is made in Paraguay, but nearly all on a small scale. The quantity produced is, however, insufficient to meet the demand, and a good deal is imported from Argentina, where there are some very large sugar works in the Chaco, just across the river from Paraguay. There is no demand for large plants in Paraguay; indeed, I only know of one large sugar factory in the whole country, and I am told it is not prosperous. In

Paraguay, it should be noted, like many new and thinly populated countries, small industries pay well, while the success of large ones is more problematical.

Textile fabrics.—For textile fabrics, especially cheap cotton goods, there is a large demand. Cheap cottons are sold by retailers at little or no profit, to push the sale of other wares. In this line English firms still hold their own, though competition is keen. "Ponchos," such as are made in England for the South American market, are also sold largely. They are practically the same as those sold in Argentina, though the heavier woolen sorts are not in so much demand, as the winter here is somewhat warmer.

Maté.—I see attempts are being made to introduce maté (Paraguay tea) into England. As this is the natural home of the *Illex paraguayensis*, which produces the beverage in question, the following hints may be useful. Though most of the maté (or "yerba," as it would be called in Paraguay) is shipped from Asuncion, it can be purchased to better advantage in Villa Rica or Concepcion, which are depots for the districts where it is grown. It is still less advisable to buy it in Buenos Ayres or Montevideo, as by doing so more commissions (and possibly extra duty) must be paid. Maté is now very cheap (perhaps cheaper than it has ever been), costing at present exchange about 3s. 6d. per arroba of 25 pounds; while in large lots, of 100 arrobas or more, still lower prices can be obtained. It will be advisable not to describe it in the invoice or declaration as "tea," or it may be made to pay duty as such, though the produce of an entirely different plant.

Trade-marks.—Those who wish to register trade-marks in Paraguay should apply to the Junta de Credito Publico, Asuncion. Protection is granted for ten years, and at the expiration of that term can be renewed for further periods of ten years each. Marks, when transferred, must be registered in the same office where originally granted. Applications for registration must be accompanied by two copies of the mark to be registered, with duplicate inscriptions; a receipt that the amount of dues ($50) has been paid to the treasurer of the Junta de Credito Publico, and a power of attorney, duly legalized, if the proprietor of the trade-mark does not apply personally. The power of attorney should be countersigned by the Paraguayan consul, and the name of the agent may be left in blank, to be filled in later. Fuller particulars regarding registration of trade-marks, and other useful information, may be obtained from the Guia General de la Republica del Paraguay, published annually in Asuncion.

Exchange shows a steady decline, having fallen fully 10 per cent during the last few months, and the tendency is to fall still lower. At present the premium on gold is 760, which means that the Paraguayan (paper) dollar is worth about 6½d. (13 cents), or, to be more exact, $38 to the £1.

Foreign competition is very keen in Paraguay, and the number of English houses (wholesale or retail) very few, while foreign houses, principally German, French, and Italian, are comparatively numerous. Those English firms who have any dealings with Paraguay seem to be content to work the country by means of an agency in Buenos Ayres, yet there is an opening in Asuncion and other towns for enterprising firms who make a specialty of the products of the country.

Petroleum in Mexico.—The South American Journal, October 15, 1898, says:

An important concession has been granted to the owners of a large tract of land in the State of Veracruz by the Mexican Government, which aims at establishing the petroleum industry there on a firm and satisfactory basis. The concessionaries in this case own an area of about 10 square miles in extent, close to the

city of Papantla, in the State of Veracruz, where the existence of petroleum oil has been conclusively established. Wells have been sunk and borings made to the oil-bearing strata, and from some of these bores oil is at the present moment running to waste in considerable quantities, and the evaporation of the naphtha from this wasted oil is said to have left a very valuable deposit of asphalt. From £10,000 to £12,000 have been spent by the original owners of the land in proving conclusively the presence of the petroleum. The present owners of the property have received, in consideration of their being the pioneers of the industry in Mexico, two valuable concessions. One of these is from the Federal Government, and exempts them from all taxes for many years; while the State authorities have further granted them the right of laying pipes, erecting pumping stations, etc., without paying way leave over the property traversed by the pipes. This is obviously a very important permission in itself, as it liberates the owners from what might otherwise have been a serious future burden. The property and concessions have now been acquired by a group of English capitalists.

French Enterprise in Siberia.—The following extract is from the London and China Telegraph, London, October 17, 1898:

A Siberian paper says that a syndicate of French financiers has been formed to start Franco-Russian factories in various parts of Asiatic Russia. The first will be opened at Vladivostock, and among its aims are the following: The exploitation of Siberian timber forests; the erection of hotels, on the French model, in six of the chief towns of the Russian Far East, including Port Arthur, and at various points along the Great Siberian Railway; and the construction of a factory for the making of high explosives for mining purposes in one of the central towns of eastern Siberia. A syndicate has also been formed to arrange for steamship traffic on the rivers and for the coasting trade of the Amur and the maritime territories. A Franco-Russian company, the "Nord Maritime," says the same paper, has undertaken to connect both ends of the Great Siberian Railway by sea with Dunkirk.

Foreigners in Japanese Enterprises.—The Revue du Commerce Extérieur, Paris, September 3, 1898, says:

There has been a lively controversy as to whether foreigners could be shareholders in Japanese enterprises. The last modifications of the civil code grant them the right to engage in all undertakings, such as banks, railways, etc., in Japan.

INDEX.

VOL. LVIII—NOS. 216, 217, 218, AND 219.

Acetylene, France, 279.
Aden, bicycles, 284.
Africa, East, commercial conditions, 292.
Africa, South:
  Agricultural implements, 97, 381.
  Ale and beer, 107.
  American vines, 90.
  Bicycles, 96, 372.
  Cape Colony, commerce, 84.
  Cape Colony, gold shipments, 630.
  Cape Colony, government supplies, 373.
  Cape Colony, imports and exports, 376.
  Cape Colony, leather, 297.
  Cape Colony, petroleum regulations, 154.
  Cape Colony, tariff changes, proposed, 89.
  Cape Colony, telephones, 154.
  Cape Colony, vehicles, 311.
  Coal, 99.
  Cold-storage plants, 93.
  Commerce, 78.
  Customs union, proposed, 625.
  Diamond exports, 317.
  Eggs and butter, 102.
  Electrical machinery, 372.
  Exhibition, freight rates for, 311.
  Exporters, United States, advice to, 457.
  Flour and cereals, 101.
  Freight rates, 378.
  Furniture, American, 456.
  Gas, 372.
  Groceries and provisions, 100.
  Harness, 93.
  Horses and mules, 93.
  Illuminants, 107.
  Immigration and postage, 625.
  Implements, agricultural, 97, 381.
Africa, South—Continued.
  Imports, 77, 78.
  Lard, 107.
  Law regarding commission agents, 154.
  Lumber, 99.
  Natal, agriculture, 380.
  Natal, commerce, 88.
  Natal, imports, 612.
  Natal, imports and railways, 89.
  Openings, 372.
  Orange Free State, exports, 153.
  Roofing slates, 377.
  Shipping, American freight, 379.
  Tobacco, 377.
  Trade openings, 93.
  Transvaal, trade conditions, 630.
  Watches and clocks, 382.
  Windmills, 458.
Agricultural conditions, Bermuda, 301.
Agricultural credit loan act, Canada, 150.
Agricultural implements:
  South Africa, 97, 381.
  Uruguay, 237.
Agricultural machinery:
  United States, England, 480.
  Russia, reduction of duty, 74.
Agriculture:
  British Columbia, 430.
  Natal, 380.
  Paraguay, 152.
Alaska, prospectors, warning, 119.
Albert, T. J. (consul, Brunswick), Cuban sugar, competition, 421.
Ale and beer, South Africa, 107.
Allen, H. N. (consul-general, Seoul):
  Cigarettes, Korea, 268.
  Duty on grain suspended, Korea, 155.
  Korea, educational institutions and methods, 408.

Allen, H. N.—Continued.
Nuts as food, Korea, 546.
Ports, opening, Korea, 31.
United States civil engineer, Korea, 303.
American-Danish steamship service, 468.
American enterprise, British Honduras, 470.
Americans, China, 470.
Amsterdam, emigration (1897), 440.
Angell, J. B. (minister, Constantinople), wheat, export prohibited, Turkey, 308.
Anglo-American Chamber of Commerce, Belgium, 61.
Aniline colors, German, export, 226.
Animals, Switzerland, 474.
Antigua, sugar factory, government, 627.
Antwerp:
Congress on tariffs and labor, 60.
Ivory, 462.
Apples, American, Germany, 353.
Apples, American, and fruit market, Germany, 529.
Apples, dried, American, France, 143.
Apples, dried, and staves, France, 462.
Aphthous stomatitis, Belgium, 307.
Arabia:
Aden, bicycles, 284.
Watches and clocks, 382.
Argentine Republic:
Export bounties, 584.
Tariff changes, 471.
Wheat market, 241.
Association, cooperative cheese, Belgium, 467.
Atwell, W. P. (commercial agent, Roubaix):
Exposition, floating, Austrian, 454.
France, commerce (1898), 299.
Labor, North France, 630.
Weaving machine, new, France, 581.
Wheat crop, good, France, 629.
Australasia, federal movement, 19.
Australia:
Coffin furniture, 304.
Railway material wanted, 472.
Australia, Western:
Exposition, 614.
Industrial conditions, 614.
Austria:
Exposition, floating, 454.
Potato flour, 68.
Austria-Hungary:
Foreign trade, 65.
Reichenberg, button industry, 483.
Vienna, button industry, 481.
Avery, W. L. (consul, Belize), American enterprise, British Honduras, 470.
Aymé, L. H. (consul, Guadeloupe):
Charter parties, Guadeloupe, 424.
Duties, Guadeloupe: Meat, scarcity, 245.
Duties, new, Guadeloupe, 424.
Finances, Guadeloupe, 627.
Guadeloupe, economic conditions, 139.
Port, Pointe a Peter, 599.
Shoes, United States, Guadeloupe, 628.

Bale, round cotton, Ghent, 64.
Ballooning, Switzerland, 623.
Bandinel, J. J. F. (consul, Niuchwang), China, affairs, 155.
Bank:
Mechanics', Venezuela, 626.
Postal savings, Java, 631.
Barbados, export bounties, 584.
Barlow, A. D. (consul-general, Mexico), copyright law, Mexico, 244.
Barmen:
Button industry, 406.
Commercial conditions, 462.
Barnes, J. A. (consul, Cologne):
Commission houses, American, Germany, 355.
Fruit, American, objections, German, 354.
Trichinæ: United States hog products, German inspection, 200.
Barrel heads and staves, duty on, France, 307.
Bavaria, hops, 148.
Beaupré, A. M. (consul-general, Guatemala), tariff increase, Guatemala, 308.
Bedloe, E. (consul, Canton):
Oil trade, American, hindrances, China, 23.
Russia in Chinese markets, 397.
Beer and ale, South Africa, 107.
Beet crop, Russia (1897), 148.
Beet cultivation, Russia, 466.
Beet, sugar, cultivation, good seed, 451.
Beet-sugar exports, Germany, 57.
Belgian enterprise, China, 400.

Belgium:
Antwerp, ivory, 462.
Aphthous stomatitis, 307.
Bale, round cotton, Ghent, 64.
Brussels, branch post-offices, 475.
Brussels, electric lights, 213.
Chamber of Commerce, Anglo-American, 61.
Cheese association, cooperative, 467.
Commerce (1897), 59.
Congress on tariffs and labor, Antwerp, 60.
Duty on lumber, 237.
Education, technical, and trade, 583.
Export bounties, 585.
Firearms, exportation, 63.
Ghent, exposition, provincial, 622.
Glucose, manufacture, laws governing, 294.
Labor, condition, 465.
Liege, firearms, 149.
Lumber trade, 227.
Savings and pension bureau, 437.
Straw and flax goods, 64.
Sugar conference, international, Brussels, 307.
Taxes, city, 438.
Telegraphy without wires, 307.
Wines, California, 198.
Bell, G. W. (consul, Sydney), federal movement, Australasia, 19.
Bergh, R. S. S. (consul, Gothenburg):
Iron industry, English vs. American, 579.
Railways, street, Gothenburg, 571.
Bergholz, L. (consul, Erzerum), Erzerum business houses, 383.
Berlin, Brussels, and Paris, telephone between, 476.
Berlin, button industry, 485.
Bermuda, agricultural conditions, 301.
Beutelspacher, G. (commercial agent, Moncton):
Mining, Canada, 471.
Raspberries, exporting, Canada, 310.
Vancouver-Vladivostock steamship service, 631.
Bicycle industry, Germany, 283.
Bicycle trade:
Malta, 113.
Tunis, 305.
Bicycle, United States, competition, England, 285.
Bicycles:
Aden, 284.
Colombia, 151.
Java, 521.
Mexico, 286.
Ontario, 251.
Scotland, 347.
South Africa, 96, 372.
United States, Scotland, 448.
Billheimer, J. C. (consul, Zanzibar), Zanzibar and East Africa, commercial conditions, 292.
Birmingham, button industry, 491.
Blending wines, foreign, Germany, 199.
Blom, J. (vice and deputy consul, Copenhagen):
Canned goods, American, Denmark, 461.
Danish-American steamship service, 468.
Machinery, American, Denmark, 352.
Slates, American roofing, Denmark, 460.
Bottles, siphon:
England, 40.
France, 39.
Bouchsein, M. (consul, Barmen):
Button industry, Barmen, 486.
Commercial conditions, Barmen, 462.
Bounties, export:
Argentine Republic, 584.
Barbadoes, 584.
Belgium, 585.
British Honduras, 585.
Chile, 585.
China, 585.
Colombia, 586.
Dominican Republic, 588.
Ecuador, 586.
France, 586.
French West Indies, 586.
Germany, 588.
Haiti, 588.
Japan, 588.
Leeward Islands, 589.
Miquelon, 589.
Morocco, 589.
Netherlands, 589.
Nicaragua, 591.
Paraguay, 591.
Peru, 591.

Bounties, export—Continued.
Russia, 591.
Samoa, 592.
Society Islands, 592.
Sweeden and Norway, 592.
Switzerland, 593.
Uruguay, 591.
Venezuela, 593.
Boyle, J. (consul, Liverpool):
Chemical trade, English, 35.
"Country-damaged" cotton, England, 516.
Furniture, United States, England, 271.
Bradley, W. H. (consul, Tunstall), potteries, Staffordshire, 299.
Brazil:
Carbons, 604.
Coal bids, 340.
Coal, demand for, by Government, 309.
Coal imports, 309.
Coffee crop, 334.
Consular service, German, increase, 120.
Gunpowder, 602.
Mangabeira rubber, São Paulo, 607.
Resources, 337.
Maniçoba rubber, 606.
Rio de Janeiro, port charges and regulations, 571.
Rio de Janeiro, steamship communication, 570.
Trade conditions, 638.
United States products, 520.
Bread, world's supply of wheat for, 385.
Breckinridge, C. R. (minister, St. Petersburg), export bounties, Russia, 591.
Breslau:
Industries, 223.
Wages, 224.
Brittain, J. I. (consul, Nantes):
American dried apples, France, 143.
Apples, dried, and staves, France, 462.
Dovetailing machines, France, demand, 461.
Duty on staves and barrel heads, France, 307.
Flour mill, Nantes, 306.
British Columbia:
Agriculture, 430.
Coal industries, 430.
British Columbia—Continued.
Dawson City and the gold fever, 432.
Electric generators, new system, 431
Industrial and commercial enterprises, 430.
Railway subsidies, 114.
Telegraph lines, 430.
Vancouver Island, mining, 432.
British Honduras:
American enterprise, 470.
Export bounties, 585.
British trade, competition, 491.
British vs. American shipping rates, 508.
British vs. Russian trade, Persia, 158.
Brodowski, E. Z. (consul, Fürth), glass industry, Germany, 135.
Brühl, L. H. (consul, Catania), nuts as food, Italy, 539.
Brunot, H. S. (consul, St. Etienne), France, market, 349.
Brush, H. W. (consul, Clifton), Canada, imports from United States, 117.
Brussels:
Branch post-offices, 475.
Electric lights, 213.
Sugar conference, international, 307.
Brussels, Paris, and Berlin, telephone between, 476.
Bryan, C. P. (minister, Brazil):
Coal bids, Brazil, 340.
Demand for coal by Brazilian Government, 309.
Buck, A. E. (minister, Tokyo):
Export bounties, Japan, 588.
Japan, harbor regulations, open ports, 255.
Tariff, new, and harbor regulations, Japan, 472.
Treaties and commercial code, Japan, 472.
Buchanan, W. I. (minister, Buenos Ayres):
Export bounties, Argentine Republic, 584.
Tariff changes, Argentine Republic, 471.
Bureau of Foreign Commerce, France, 130.
Burke, M. J. (consul, St. Thomas):
Bicycles, Ontario, 251.
Harbor and railway improvements, Ontario, 249.

Burke, D. N. (consul-general, Tangier), export bounties, Morocco, 589.
Butter:
American, Japan, 419.
Paraguay, 420.
Butter and eggs, South Africa, 102.
Button industry:
Barmen, 486.
Berlin, 485.
Birmingham, 491.
Europe, 481.
Freiberg, 486.
Gera, 488.
Paris, 484.
Reichenberg, 483.
Vienna, 481.

Calcium acetate and sodium acetate, duties, Netherlands, 69.
Calcium carbide:
France, 279.
Present and prospective supply, 47.
Calcutta:
Cotton piece goods, 32.
Jute industry, effect of plague on, 304.
Trade with United States (1897–98), 125.
California wines, Belgium, 198.
Caloric motor, Diesel, at Munich exposition, 44.
Camphor, Japan, 310.
Camphor trade, Japan, 629.
Canada:
Agricultural credit loan act, 150.
Cheese, 253.
Customs regulations for sporting outfits, 248.
Dawson City, conditions, 536.
Harbor and railway improvements, Ontario, 249.
Imports from United States, 117.
Market, smoked meats, 309.
Manitoba, fruit market, 533.
Market for cattle and horses, 252.
Mining, 471.
Ontario, pulp and paper mill, 534.
Ontario, vinegar manufacturers, amalgamation, 631.
Railway, electric street, 250.
Railway, Canadian Pacific, freight rates, 150.
Raspberries, exporting, 310.
Canada—Continued.
Tariff modifications, 246.
Trade increase, 118.
Trade with South Africa, 611.
Vancouver-Vladivostock steamship service, 631.
Canadian Pacific Railway, freight rates, 150.
Canal and railway contract, Madagascar, 128.
Canal, new, Germany, 466.
Canal, Suez, traffic, 298.
Canned goods, American, Denmark, 461.
Canned meats, Madagascar, 254.
Cape Colony:
Commerce, 84.
Gold shipments, 630.
Government supplies, 373.
Imports and exports, 376.
Leather, 297.
Petroleum regulations, 154.
Tariff changes, proposed, 89.
Telephones, 154.
Vehicles, 311.
Caracas warehouse, 176.
Carbons, Brazil, 604.
Caroline Islands, 12.
Cartage, London, 217.
Cast-iron industry, Russia (1897), 76.
Cattle and horses:
Market, Canada, 252.
Switzerland, 436.
Ceilings, stamped steel, opening for, England, 621.
Cement trust, proposed, Japan, 624.
Central America, United States of, constitution, 601.
Cereals and flour, South Africa, 101.
Chamber of Commerce, Anglo-American, Belgium, 61
Charter parties, Guadeloupe, 424.
Cheese, Canada, 253.
Chemical trade, English, 35.
Chester, F. D. (consul, Budapest), mineral waters, artificial, Hungary, 434.
Chile:
Export bounties, 585.
Financial conditions, 321.
China:
Affairs, 155.
Americans, 470.
Belgian enterprise, 400.
Directories, commercial, 470.

China—Continued.
Export bounties, 585.
Exporters to, hints, 405.
Hankau, German commerce, 122.
Kyao-chau, a free port, 468.
Mining and railway concessions, 260.
Mints, new, 558.
Missionaries, treatment, 406.
Navigation, inland, revised regulations, 563.
New trade conditions, 443.
Newspaper, official, 407.
Oil trade, American, hinderances, 23.
Patents and copyrights, 396.
Pekin-Hankau railway contract, 401.
Railway construction, decree as to, 303.
Railway supplies, 25.
Railways, 160.
Railways and mines, Chinese control, 564.
Regulations, inland navigation, 261.
Russia in markets of, 397.
Shanghai, railways, electric, 260.
Shansi concession, 289.
Shantung, German acquisitions, 556.
Tientsin, 550.
Tobacco, 629.
Woosung, port, 26.
Yangtze, new trade regulations, 28.
China, North, United States trade (correction), 441.
Churchill, H. W. (consul-general, Samoa), export bounties, Samoa, 592.
Cigarettes, Korea, 268.
Civil engineer, United States, Korea, 303.
Clark, B. F. (consul, Pernambuco), maniçoba rubber, Brazil, 606.
Clocks and watches:
Arabia, 382.
South Africa, 382.
Coal:
American, foreign countries, 343.
As motive power, Germany, 466.
Bids, Brazil, 340.
Demand for, by Brazilian Government, 309.
High price, France, 473.
Imports, Brazil, 309.
Coal—Continued.
Industry, British Columbia, 430.
South Africa, 99.
Strike, South Wales, 345.
Venezuela, 240.
Code, commercial, and treaties, Japan, 472.
Coffee crop, Brazil, 334.
Coffee growing, Paraguay, 608.
Coffin furniture, Australia, 304.
Cold-storage plants, South Africa, 93.
Cole, C. L. (consul-general, Dresden), export methods, American, complaints, Germany, 622.
Colombia:
Bicycles, 151.
Export bounties, 586.
Panama, traffic (1895 and 1896), 316.
Railways, 281.
Colonies and protectorates, French, 203.
Colonization, Venezuela, 598.
Commercial agents, tax on, Kongo Free State, 305.
Commercial code and treaties, Japan, 472.
Commercial-traveler tax, Switzerland, 220.
Commission agents, law regarding, South Africa, 154.
Commission houses, American, Germany, 355.
Concession:
Porcelain, Venezuela, 627.
Shansi, 289.
Conger, E. H. (minister, Pekin):
Chinese control, railways and mines, 564.
Missionaries, China, treatment, 406.
Navigation, inland, China, revised regulations, 563.
Newspaper, official, China, 407.
Patents and copyrights, China, 396.
Congress:
Orientalists, Italy, 146.
Tariffs and labor, Antwerp, 60.
Constitution, United States of Central America, 601.
Consular officers, acknowledgment to, 610.
Consular reports transmitted to other Departments, 157, 312, 476, 632.
Consular service as an aid to foreign trade, 134.

Consular service, German, increase, Brazil, 120.
Consuls, American, activity, 617.
Contract:
Canal and railway, Madagascar, 128.
Railway, Madagascar, 566.
Railway, Pekin-Hankau, 401.
Cooperative cheese association, Belgium, 467.
Copyright law, Mexico, 244.
Copyrights and patents, China, 396.
Corey, G. J. (consul, Amsterdam):
Emigration, Amsterdam (1897), 440.
Pepper, decortication, Netherlands, 549.
Cork, flax spinning, 157.
Corn, indian, stalks, utilization, Russia, 216.
Cotton:
"Country damaged," England, 516.
Industry, France, 43.
Piece goods, Calcutta, 32.
Trade, world's, 41.
Cotton and cotton goods, Japan, 30.
Cotton bale, round, Ghent, 64.
Covert, J. C. (consul, Lyons):
Bureau of Foreign Commerce, France, 130.
Trade openings, France, 350.
Cramer, E. C. (consul, Florence), pork, American, opposition, Italy, 474.
Credit loan act, agricultural, Canada, 150.
Crop:
Beet, Russia (1897), 148.
Coffee, Brazil, 334.
Flax and hemp, Russia, 467.
Hay, Germany, large, 474.
Hop, Great Britain, 467.
Jute, India (1898), 473.
Rice, Japan, 629.
Wheat, good, France, 629.
Cruisers, new, Stettin, 262.
Cuba, sugar of, competition, 421.
Culver, H. S. (consul, London, Ontario):
Vinegar manufacturers, Ontario, amalgamation, 631.
Canadian cheese, 253.
Cunningham, E. S. (consul, Aden):
Bicycles, Aden, 284.
Watches and clocks, Arabia and South Africa, 382.
Customs regulations for sporting outfits, Canada, 248.
Customs union, proposed, South Africa, 625.

Dawson City and the gold fever, 432.
Dawson City, conditions, 536.
Debt, foreign, Nicaragua, 308.
Decortication, pepper:
Dutch India, 549.
England, 548.
Netherlands, 549.
Straits Settlements, 550.
Denby, C. (minister, Pekin):
China, inland navigation regulations, 261.
Chinese decree as to railway construction, 303.
Mining and railway concessions, China, 260.
Export bounties, China, 585.
Yangtze, new trade regulations, 28.
Denmark:
Canned goods, American, 461.
Danish-American steamship service, 468.
Machinery, American, 352.
Slates, American roofing, 460.
Diamond exports, South Africa, 317.
Diederich, H. W. (consul, Magdeburg), sugar-beet cultivation, good seed, 451.
Diesel caloric motor, Munich exposition, 44.
Dillingham, F. (consul, Auckland), import of plants prohibited, New Zealand, 623.
Directories, commercial, China, 470.
Distilling industry, Russia, 389.
Docks, Queenstown, 580.
Dominican Republic, export bounties, 588.
Dovetailing machines, France, demand, 461.
Doty, J. L. (consul, Tahiti):
Caroline Islands, 12.
Export bounties, Society Islands, 592.
Dudley, L. E. (consul, Vancouver):
Alaska, warning to prospectors, 119.
Market for cattle and horses, Canada, 252.

DuBois, J. T. (consul-general, St. Gall):
Ballooning, Switzerland, 623.
Exports, Switzerland, to United States, 306.
Horses and cattle, Switzerland, 436.
Imports, increased, Switzerland, 630.
Railways, electric street, Europe, 300.
United States goods, Switzerland, 196.
Dutch India:
Pepper, decortication, 549.
Petroleum, 480.
Duties:
Guadeloupe, 245.
Increase, Nicaragua, 472.
New, Guadeloupe, 424.
Sodium acetate and calcium acetate, Netherlands, 69.
Duty, exemptions, Netherlands, 631.
Duty on agricultural machinery, Russia; reduction, 74.
Duty on grain suspended, Korea, 155.
Duty on lumber, Belgium, 237.
Duty on soap, Haiti, 628.
Duty on staves and barrel heads, France, 307.

Ecuador, export bounties, 586.
Education:
Commercial, Gera, 370.
Higher, Saxony, 464.
Technical and trade, Belgium, 583.
Educational institutions and methods, Korea, 408.
Eggs and butter, South Africa, 102.
Eggs and poultry, Russia, 474.
Egypt:
Suez Canal traffic, 298.
Trade conditions, 161.
Electric generators, new system, British Columbia, 431.
Electric lamps:
Kobé, 625.
Yokohama, 469.
Electric lights:
Brussels, 213.
New incandescent filament, 45.
Electric railways:
Europe, 300.
Germany, 464.
Ontario, 250.
Electric railways—Continued.
Rheims, 620.
Shanghai, 260.
Electrical machinery, South Afri ..
Emigrants, Italian, Venezuela, 14..
Emigration, Amsterdam (1897), 440.
England:
American manufactures, 638.
American trade methods, faults, 359.
Bicycle, United States, competition, 285.
Ceilings, stamped steel, opening for, 621.
Chemical trade, 35.
"Country-damaged" cotton, 516.
Machinery, American agricultural, 480.
Newcastle, trade, 435.
Potteries, Staffordshire, 299.
Pepper, decortication, 548.
Siphon bottles, 40.
Steam turbine, 450.
Furniture, United States, 271, 621.
United States shoes, 194.
English vs. American iron industry, 579.
Erdman, C. W. (consul, Breslau):
Breslau, industries, 223.
Wages, Breslau, 224.
Erzerum business houses, 383.
Europe:
Button industry, 481.
Nails, American wire, 460.
Railways, electric street, 300.
Salesmen, United States, 275.
Steel plates, American, demand, 156.
Sugar question, 33.
Women, employment, 145.
Everett, S. B. (consul, Batavia):
Bicycles, Java, 521.
Match industry, Java, 123.
Pepper, decortication, Dutch India, 549.
Quinine, Java, 266.
Postal savings bank, Java, 631.
Exhibition:
Machinery, Munich, 157.
South Africa, freight rates for, 311.
Export bounties:
Argentine Republic, 584.
Barbados, 584.
Belgium, 585.
British Honduras, 585.
Chile, 585.

Export bounties—Continued.
China, 585.
Colombia, 586.
Dominican Republic, 588.
Ecuador, 586.
France, 586.
French West Indies, 586.
Germany, 588.
Haiti, 588.
Japan, 588.
Leeward Islands, 589.
Miquelon, 589.
Morocco, 589.
Netherlands, 589.
Nicaragua, 591.
Paraguay, 591.
Peru, 591.
Russia, 591.
Samoa, 592.
Society Islands, 592.
Sweden and Norway, 592.
Switzerland, 593.
Turkey, 593.
Uruguay, 591.
Venezuela, 593.
Export markets, search for, 187.
Export methods, American, complaints, Germany, 622.
Export of grain, Russia, proposition to prohibit, 73.
Export trade:
Germany, 363.
United States, suggestions, 513.
World's, 145.
Export unions, Germany, 362.
Export, wheat, prohibited, Turkey, 308.
Exportation, firearms, Belgium, 63.
Exporters to China, hints, 405.
Exporters, United States, to South Africa, advice to, 457.
Exports:
Aniline colors, German, 226.
Cape Colony, 85.
Diamonds, South Africa, 317.
France, decrease, 366.
Germany, to United States, 225, 364.
Machinery, Germany, 144.
Silk, Japan, 311.
Orange Free State, 153.
Sugar, beet, Germany, 57.
Switzerland, to United States, 306.
United States, Great Britain, hindrances, 508.
Exports and imports:
Cape Colony, 376.
Germany, 143.
Exposition:
Floating, Austrian, 454.
Munich, Diesel caloric motor, 44.
Provincial, Ghent, 622.
Western Australia, 614.

Factory, government sugar, Antigua, 627.
Famine, Russian, 72.
Farmers, Germany, 57.
Federal movement, Australasia, 19.
Ferguson, T. B. (minister, Stockholm), export bounties, Sweden and Norway, 592.
Filament, new incandescent, for electric lights, 45.
Finances:
Chile, 321.
Guadeloupe, 627.
Spain, 317.
Uruguay, 626.
Firearms:
Exportation, Belgium, 63.
Liege, 149.
Fishery, mackerel, Ireland, 147.
Flax and hemp crop, Russia, 467.
Flax and straw goods, Belgium, 64.
Flax spinning, Cork, 157.
Flour and cereals, South Africa, 101.
Flour and wheat, Japan, 156.
Flour mill, Nantes, 306.
Flour:
Potato, Austria, 68.
Wheat, Japan, 562.
Formosa tea trade, 415.
Fowler, J. (consul, Chefoo):
German acquisitions, Shantung, 556.
United States trade, North China (correction), 441.
France:
Apples, dried, American, 143.
Apples, dried, and staves, 462.
As a market, 349.
Bureau of Foreign Commerce, 130.
Calcium carbide and acetylene, 279.
Coal, high price, 473.
Colonies and protectorates, 203.
Commerce (1898), 298.
Cotton industry, 43.
Dovetailing machines, demand, 461.
Duty on staves and barrel heads, 307.

France—Continued.
Export bounties, 586.
Exports, decrease, 366.
Nantes, flour mill, 306.
Nuts as food, 537.
Marseilles, hog imports, 619.
New fields for United States manufactures, 191.
Paris, button industry, 484.
Rheims, electric roads, 620.
Siphon bottles, 39.
Subsidies, French line of steamers, 209.
Subsidies, French line of steamers (correction), 312.
Tetanus, treatment by cerebral injection, 475.
Trade openings, 350.
Weaving machine, new, 581.
Wheat crop, good, 629.
France, North, labor, 630.
Frankenthal, A. L. (consul, Berne):
Animals, Switzerland, 474.
Philippines, business points, 446.
Railway rates, cheap, Switzerland, 222.
Tax, commercial travelers, Switzerland, 220.
War vessels, German build, 463.
Free port, Kyao-chau, 468.
Freiburg, button industry, 486.
Freight, American, shipping, to South Africa, 379.
Freight rates:
Canadian Pacific Railway, 150.
South Africa, 378.
Freight traffic, Russian railroads, 391.
French enterprise, Siberia, 641.
French West Indies, export bounties, 586.
Fruit, American, objections, Germany, 354.
Fruit market and American apples, Germany, 529.
Fruit market, Manitoba, 533.
Furniss, H. W. (consul, Bahia):
Carbons, Brazil, 604.
Coal imports, Brazil, 309.
Gunpowder, Brazil, 602.
Furniture, American:
England, 271, 621.
South Africa, 456.
Fur-seal industry, Japan, 469.
Gas, South Africa, 372.
Gera:
Button industry, 488.
Commercial education, 370.
Weaving school, 370.
German consular service, increase, Brazil, 120.
German interests, Guatemala, 160.
Germany:
Acquisitions in Shantung, 556.
American apples, 353.
American trade opportunities, 524.
Aniline colors, export, 226.
Barmen, button industry, 486.
Barmen, commercial conditions, 462.
Beet-sugar exports, 57.
Bicycle industry, 283.
Breslau, industries, 223.
Breslau, wages, 224.
Berlin button industry, 485.
Canal, new, 466.
Coal as motive power, 466.
Commercial bureau new, 280.
Commercial education, Gera, 370.
Commission houses, American, 355.
Consular service as an aid to foreign trade, 134.
Diesel caloric motor at Munich exposition, 44.
Electric roads, 464.
Export trade, 363.
Export bounties, 588.
Export methods, American, complaints, 622.
Export unions, 362.
Exports to United States, 225, 364.
Farmers, 57.
Filament, new incandescent, for electric lights, 45.
Freiburg, button industry, 486.
Fruit, American, objections, 354.
Fruit market and American apples, 529.
Gera, button industry, 488.
Gera, weaving school, 370.
Glass industry, 135.
Hay crop, large, 474.
Heidelberg students, passports required, 146.
High prices and increased meat imports, 528.
Hog products, United States, inspection, 200.

Germany—Continued.
Imports, increased meat, and high prices, 528.
Imports and exports, 143.
Insurance system, German workingmen's, value, 51.
Land, sterile, reclaiming, 58.
Machinery, American and German, 55.
Machinery exports, 144.
Malarial disease, German studies, 593.
Munich, machinery exhibition, 157.
Pork, United States, opposition, 54.
Saxony, education, higher, 464.
Shipping, 137.
Stettin, cruisers, new, 463.
Strikes (1897), 433.
Stuttgart, sample bureau, 367.
Straw industry, 53.
Sugar-beet cultivation, good seed, 451.
Trade differences with United States, adjustment, 473.
Trade with Russia, 369.
Trade with South America, 138.
Traveling agents and foreign languages, 359.
Trichinæ, 200.
United States manufactures, Munich, outlook, 195.
United States shoes, 352.
War vessels, German build, 463.
Water courses, mountain, as industrial aids, 618.
Wines, foreign blending, 199.
Women in trade, 475.
Workingmen's houses, 465.
Ghent:
Bale, round cotton, 64.
Exposition, provincial, 622.
Gibbs, M. W. (consul, Tamatave):
Canal and railway contract, Madagascar, 128.
Meats, canned, Tamatave, 254.
Railway contract, 566.
Gilbert, H. W. (consul, Liege):
Belgium, commerce (1897), 59.
Firearms, Liege, 149.
Shoe imports, Philippines, 10.
Straw and flax goods, Belgium, 64.
Telegraphy without wires, Belgium, 307.
Wines, California, Belgium, 198.
Glass industry:
Germany, 135.
Japan, 418.
Glucose manufacture, laws governing, 294.
Goding, F. W. (consul, Newcastle):
Iron works, New South Wales, 631.
Newcastle, trade, 435.
Gold fever, Dawson City, 432.
Gold production, Uruguay, 238.
Gold shipments, Cape Colony, 630.
Goldschmidt, J. (consul-general, Berlin):
Beet-sugar exports, Germany, 57.
Button industry, Berlin, 485.
Caracas warehouse, 176.
Coal, Venezuela, 240.
Goodnow, J. (consul-general, Shanghai):
Directories, commercial, China, 470.
Exporters to China, hints, 405.
Mints, new, China, 558.
Railways, electric, Shanghai, 260.
Railway supplies, China, 25.
Tobacco, China, 629.
Gothenburg, street railways, 571.
Gowdy, J. K. (consul-general, Paris):
Button industry, Paris, 484.
Colonies and protectorates, French, 203.
Exports, French, decrease, 366.
Siphon bottles, France, 39.
Gowey, J. F. (consul-general, Yokohama):
Camphor, Japan, 310.
Butter, American, Japan, 419.
Camphor trade, Japan, 629.
Cement trust, proposed, Japan, 624.
Electric lamps, Yokohama, 469.
Fur-seal industry, Japan, 469.
Glass industry, Japan, 418.
Japan, trade (1898), 302.
Japan, hat trade, 563.
Japan, silk exports, 311.
Japan, steamship service, 302.
Labor, cheap, Japan, 624.
Perfumery imports, Japan, 155.
Rice crop, Japan, 629.
Wheat flour, Japan, 562.
Graham, W. H. H. (consul, Winnipeg), fruit market, Manitoba, 533.
Grain, duty on, suspended, Korea, 155.
Grain export, Russia, proposition to prohibit, 73.

Great Britain:
British trade, competition, 491.
British vs. American shipping rates, 508.
Exports, American, hindrances, 508.
Hop crop, 467.
Greece, United States trade, 356.
Greene, W. M. (consul, Bermuda), agricultural conditions, Bermuda, 301.
Griffin, W. T. (commercial agent, Limoges):
Nuts as food, France, 537.
United States manufactures, new fields for, 191.
Groceries and provisions, South Africa, 100.
Grout, J. H., jr. (consul, Malta):
Bicycle trade, Tunis, 305.
Malta, bicycle trade, 113.
Malta, trade conditions, 108.
Guadeloupe:
Charter parties, 424.
Duties, 245.
Duties, new, 424.
Economic conditions, 139.
Financial conditions, 627.
Meat, scarcity, 245.
Pointe a Petre, port, 599.
Shoes, United States, 628.
Guatemala:
German interests, 160.
Tariff increase, 308.
Gunpowder, Brazil, 602.

Haiti:
Duty on soap, 628.
Export bounties, 588.
Industrial conditions, 428.
Mining enterprise, American, 309.
Railway, projected, construction, 121.
Halstead, M. (consul, Birmingham):
American trade methods, England, faults, 359.
Bicycle, United States, competition, England, 285.
British vs. American shipping rates: Hindrances to American exports, 508.
Coal, American, foreign countries, 343.
Coffin furniture, Australia, 304.
Consuls, American, activity, 617.
Furniture, American, England, 621.
Halstead, M.—Continued.
Hop crop, Great Britain, 467.
Locomotives and rolling stock, demand, Japan, 156.
Nails, American wire, Europe, 460.
Railway material wanted, Australia, 472.
Shoes, United States, England, 194.
Salesmen, United States, Europe, 275.
Steel plates, American, demand, Europe, 156.
Steel tubes, British, United States, 218.
Sugar factory, government, Antigua, 627.
Wheat for bread, world's supply, 385.
Hankau, German commerce, 122.
Harbor and railway improvements, Ontario, 249.
Harbor improvements, Montevideo, 239.
Harbor regulations and new tariff, Japan, 472.
Harbor regulations, open ports, Japan, 255.
Harness, South Africa, 98.
Harris, E. L. (consular agent, Eibenstock), export trade, Germany, 363.
Harris, C. B. (consul, Nagasaki):
Shipbuilding, Nagasaki, 561.
Wheat and flour, Japan, 156.
Harrison, T. S. (agent and consul-general, Cairo), Egypt, trade conditions, 161.
Hart, C. B. (minister, Bogotá), export bounties, Colombia, 586.
Harvest failure, Russia, 388.
Hat trade, Japan, 563.
Hay crop, Germany, large, 474.
Heidelberg students, passports required, 146.
Hemp and flax crop, Russia, 467.
Hitchcock, E. A. (ambassador, St. Petersburg), patents, Russia, 393.
Hiogo, port, 125.
Hoffman, W. J. (consul, Mannheim):
Heidelberg students, passport required, 146.
Land, sterile, Germany reclaiming, 58.
Hog imports, Marseilles, 619.
Hog products, United States, inspection, Germany, 200.

Holloway, W. R. (consul-general, St. Petersburg):
Agricultural machinery, Russia, reduction of duty, 74.
Beet crop, Russia (1897), 148.
Beet cultivation, Russia, 466.
Cast-iron industry, Russia (1897), 76.
Distilling industry, Russia, 389.
Flax and hemp crop, Russia, 467.
Freight traffic, Russian railroads, 391.
Harvest failure, Russia, 388.
Hops, Russia, 147.
Indian-corn stalks, utilization, Russia, 216.
Iron production and sale (1897), 575.
Poultry and eggs, Russia, 474.
Russia, petroleum industry, 214.
Russian famine, 72.
Honduras, British, American enterprise, 470.
Hop crop, Great Britain, 467.
Hopley, J. E. (consul, Southampton), gold shipments, Cape Colony, 630.
Hops:
Bavaria, 148.
Great Britain, 467.
Russia, 147.
Horses and cattle:
Market, Canada, 252.
Switzerland, 436.
Horses and mules, South Africa, 93.
Houses, workingmen's, Germany, 465.
Hossfeld, F. W. (consul, Trieste), Austria-Hungary, foreign trade, 65.
Hughes, O. J. D. (consul, Coburg), hay crop, Germany, large, 474.
Hungary, mineral waters, artificial, 434.
Hurst, C. B. (consul-general, Vienna), button industry, Vienna, 481.

Illuminants, South Africa, 107.
Immigrants, Italian, Venezuela, 140.
Immigrants, Paraguay, suggestions to, 609.
Immigration and postage, South Africa, 625.
Implements, agricultural:
South Africa, 97, 381.
Uruguay, 237.
Import of plants prohibited, New Zealand, 623.
Import tax, additional, Uruguay, 471.
Imports:
Cape Colony, 84.
Canada, United States, 117.
Coal, Brazil, 309.
Increased meat, and high prices, Germany, 528.
Hogs, Marseilles, 619.
Natal, 89, 612.
Perfumery, Japan, 155.
Shoes, Philippines, 10.
South Africa, 77, 78.
United States, from Manchester, 364.
United States, from Germany, 225.
United States, from Switzerland, 306.
Increased, Switzerland, 630.
Imports and exports:
Cape Colony, 376.
Germany, 143.
India:
Calcutta jute industry, effect of plague on, 304.
Calcutta, trade with United States (1897–98), 125.
Cotton piece goods, Calcutta, 32.
Jute crop (1898), 473.
India, Dutch, petroleum, 480.
Indian-corn stalks, utilization, Russia, 216.
Insurance system, German workingmen's, value, 51.
Ireland:
Cork, flax spinning, 157.
Docks, Queenstown, 580.
Mackerel fishery, 147.
Iron, cast, industry, Russia (1897), 76.
Iron industry, English vs. American, 579.
Iron mining and wages, Sweden, 573.
Iron production and sale, Russia (1897), 575.
Iron works, New South Wales, 631.
Italian emigrants, Venezuela, 140.
Italy:
Congress of orientalists, 146.
Machinery prize competition, 219.
Nuts as food, 539.
Pork, American, opposition, 474.
Ivory:
Antwerp, 462.
Production and trade, 479.

Jackson, G. H. (consul, La Rochelle), coal, high price, France, 473.

Japan:
American products, 633.
Butter, American, 419.
Camphor, 310.
Camphor trade, 629.
Capital, foreign, 317.
Cement trust, proposed, 624.
Cotton and cotton goods, 30.
Enterprises, foreigners in, 641.
Export bounties, 588.
Fur-seal industry, 469.
Glass industry, 418.
Hat trade, 563.
Harbor regulations, open ports, 255.
Labor, cheap, 624.
Lamps, electric, Kobé, 625.
Locomotives and rolling stock, demand, 156.
Nagasaki, shipbuilding, 561.
Perfumery imports, 155.
Port, Hiogo, 125.
Railways, length, 565.
Rice crop, 629.
Silk exports, 311.
Steamship service, 302.
Tariff, new, and harbor regulations, 472.
Trade (1898), 302.
Treaties and commercial code, 472.
Watch trade, 263.
Wheat and flour, 156.
Wheat flour, 562.
Yokohama, electric lamps, 469.
Java:
Bicycles, 521.
Match industry, 123.
Postal savings bank, 631.
Quinine, 266.
Jenkins, J. (consul, San Salvador), tariff rates, new, San Salvador, 426.
Jews, entry into Palestine prohibited, 476.
Johnson, A. B. (consul, Amoy):
China, new trade conditions, 443.
Formosa tea trade, 415.
Jute crop, India (1898), 473.
Jute industry, Calcutta, effect of plague on, 308.

Kehl, J. E. (consul, Stettin):
Cruisers, new, Stettin, 463.
German farmer, 57.
Kerosene, Paraguay, 153.
Klondike, distress, 310.
Kobé, electric lamps, 625.
Kongo Free State, tax on commercial agents, 305.
Korea:
Cigarettes, 268.
Duty on grain suspended, 155.
Educational institutions and methods, 408.
Nuts as food, 546.
Ports, opening, 31.
United States civil engineer in, 303.
Kyao-chau, a free port, 468.

Labor and tariffs, congress, Antwerp, 60.
Labor:
Cheap, Japan, 624.
Condition, Belgium, 465.
North France, 630.
Lamps, electric:
Kobé, 625.
Yokohama, 469.
Land, sterile, Germany, reclaiming, 58.
Lard, South Africa, 107.
Law, copyright, Mexico, 244.
Law regarding commission agents, South Africa, 154.
Laws governing glucose manufacture, Belgium, 294.
Leather, Cape Colony, 297.
Ledoux, U. J. (consul, Three Rivers):
Canada, trade increase, 118.
Railway, Canadian Pacific, freight rates, 150.
Leeward Islands, export bounties, 589.
Leishman, J. G. A. (minister, Berne), export bounties, Switzerland, 593.
Lieberknecht, A. (consul, Zurich), papyristite, 49.
Liefeld, E. T. (consul Freiberg):
Button industry, Freiberg, 486.
Electric roads, Germany, 464.
Europe, women, employment, 145.
Liege, firearms, 149.
Lights, electric, Brussels, 213.
Lincoln, G. F. (consul-general, Antwerp):
Congress on tariffs and labor, Antwerp, 60.
Ivory, Antwerp, 462.
Little, W. M. (consul, Tegucigalpa), constitution, United States of Central America, 601.

Livingston, L. W. (consul, Cape Haitien):
Haiti, industrial conditions, 429.
Railway, projected, Haiti, constuction, 121.
Loan act. agricultural credit, Canada, 150.
Locomotives and rolling stock, demand, Japan, 156.
London, cartage, 217.
Loomis, F. B. (minister, Caracas), immigrants, Italian, Venezuela, 140.
Lumber:
Duty on, Belgium, 237.
South Africa, 99.
Trade, Belgium, 227.
Lyon, S. S. (consul, Hiogo):
Cotton and cotton goods, Japan, 30.
Electric lamps, Kobé, 625.
Port, Hiogo, 125.

McCook, J. C. (consul, Dawson City):
Dawson City and the gold fever, 432.
Dawson City, conditions, 536.
Klondike, distress, 310.
McCunn, J. N. (consul, Dunfermline), bicycles, Scotland, 347.
McGinley, D. E. (consul, Athens), United States trade, Greece, 356.
Machine, new weaving, France, 581.
Machinery:
American and German, 55.
American, Denmark, 352.
Electric, South Africa, 372.
Exhibition, Munich, 157.
Exports, Germany, 144.
Prize competition, Italy, 219.
Machinery, agricultural:
Russia, reduction of duty, 74.
American, England, 480.
Machines, dovetailing, France, demand, 461.
Mackerel fishery, Ireland, 147.
Madagascar:
Canal and railway contract, 128.
Meats, canned, 254.
Railway contract, 566.
Madrigal, R. (consul, Cartagena), railways, Colombia, 281.
Mahin, F. W. (consul, Reichenberg):
Button industry, Reichenberg, 483.
Potato flour, Austria, 68.
Malarial disease, German studies, 593.
Malta:
Bicycle trade, 113.
Trade conditions, 108.
Mangabeira rubber, São Paulo, 607.
Maniçoba rubber, Brazil, 606.
Manitoba fruit market, 533.
Maracaibo, piracy in vicinity, 242.
Marine, merchant, Russia, 149.
Markets:
Cattle and horses, Canada, 252.
China, Russia in, 397.
Export, search for, 187.
France, 349.
Fruit, and American apples, Germany, 529.
Fruit, Manitoba, 533.
Paraguay, 639.
Smoked meats, Canada, 309.
Wheat, Argentine, 241.
Marseilles, hog imports, 619.
Martin, C. W. (consul, Amherstburg), smoked meats, market, Canada, 309.
Mason, F. H. (consul-general, Frankfort):
Apples, American, and fruit market, Germany, 529.
Calcium carbide, present and prospective supply, 47.
Diesel caloric motor, Munich exposition, 44.
Export market, search for, 187.
Exports, German, to United States, 225.
Filament, new incandescent, for electric lights, 45.
Malarial disease, German studies, 593.
Meat imports, increased, and high prices, Germany, 528.
Spanish-American war, German view of results, 287.
Match industry, Java, 123.
Matches, Paraguay, 151.
Mayer, D. (consul, Buenos Ayers), wheat market, Argentine, 241.
Meat-extract business, Uruguay, 237.
Meat:
Canned, Madagascar, 254.
Guadeloupe, scarcity, 245.
Imports, increased, and high prices, Germany, 528.
Smoked, market, Canada, 309.
Mechanics' bank, Venezuela, 626.

Merchant marine, Russia, 149.
Merry, W. L. (minister, San José), tariff, new, Nicaraguan, 596.
Mertens, T. (consular agent, Grao), industrial enterprises, Spain, 277.
Metcalf, H. W. (consul, Newcastle-on-Tyne), turbine, steam, England, 450.
Mexico:
  Bicycles, 286.
  Copyright law, 244.
  Petroleum, 640.
  Railroad, new, 473.
  Smelting works, 243.
Mexico, southern, natural resources, 422.
Mill:
  Flour, Nantes, 306.
  Pulp and paper, Ontario, 534.
Mines and industries, Peru, 477.
Mineral waters, artificial, Hungary, 434.
Mines and railways, China, control, 564.
Mines, Ontario, 535.
Mining:
  Canada, 471.
  Iron, and wages, Sweden, 573.
  Taxes, Venezuela, 597.
  Vancouver Island, 432.
Mining and railway concessions, China, 260.
Mining enterprise, American, Haiti, 309.
Mints, new, China, 558.
Miquelon, export bounties, 589.
Missionaries, China, treatment, 406.
Monaghan, J. C. (consul, Chemnitz):
  American trade opportunities, Germany, 524.
  Apples, American, Germany, 353.
  Bicycle industry, Germany, 283.
  Canal, new, Germany, 466.
  Coal as motive power, Germany, 466.
  Commercial bureau, new, Germany, 281.
  Consular service as an aid to foreign trade, 134.
  Cotton trade, world's, 42.
  Education, higher, Saxony, 464.
  German commerce, Hankau, 122.
  Germany, export unions, 362.
  Germany, straw industry, 53.
  Germany, trade differences with United States, adjustment, 473.
Monaghan, J. C.—Continued.
  Germany, trade with Russia, 369.
  Germany, women in trade, 475.
  Imports and exports, Germany, 143.
  Insurance system, German workingmen's, value, 51.
  Machinery exports, Germany, 144.
  Shipping, Germany, 137.
  Strikes, Germany (1897), 433.
  Germany, trade with South America, 138.
  Water courses, mountain, as industrial aids, 618.
  Workingmen's houses, Germany, 465.
Montevideo, harbor improvements, 239.
Morlan, A. E. (consul, Belize), export bounties, British Honduras, 585.
Morocco, export bounties, 589.
Morris, H. C. (consul, Ghent):
  Bale, round cotton, Ghent, 64.
  Belgian enterprise, China, 400.
  Cotton industry, France, 43.
  Cotton trade, world's, 41.
  Education, technical, and trade, Belgium, 583.
  Export trade, world's, 145.
  Exposition, provincial, Ghent, 622.
  Firearms, exportation, Belgium, 63.
  Lumber trade, Belgium, 227.
  Philippines, trade (1897), 559.
  Population, Russia, increase, 70.
  Savings and pension bureau, Belgium, 437.
  Sugar question, Europe, 33.
Motor, Diesel caloric, at Munich exposition, 44.
Munich:
  Exposition, Diesel caloric motor, 44.
  Machinery exhibition, 157.
  United States manufactures, outlook, 195.

Nagasaki, shipbuilding, 561.
Nails, American wire, Europe, 460.
Nantes, flour mill, 308.
Natal:
  Agriculture, 380.
  Commerce, 88.
  Imports, 89, 612.
  Railways, 89.
Navigation, inland, China, revised regulations, 563.

Neill, R. R. (secretary of legation, Lima), export bounties, Peru, 591.
Netherlands:
Amsterdam, emigration (1897), 440.
Duties on sodium acetate and calcium acetate, 69.
Duty, exemptions, 631.
Export bounties, 589.
Pepper, decortication, 549.
New Caledonia, pearls, 418.
Newcastle, trade, 435.
Neuer, C. (consular agent, Gera), button industry Gera, 488.
Newel, S. (minister, The Hague):
Duties on sodium acetate and calcium acetate, Netherlands, 69.
Duty, exemptions, Netherlands, 631.
Export bounties, Netherlands, 589.
New Hebrides, industries, 270.
New South Wales, iron works, 631.
Newspaper, official, China, 407.
New Zealand, import of plants prohibited, 623.
Nicaragua:
Debt, foreign, 308.
Duties, increase, 472.
Export bounties, 591.
Tariff, new, 596.
Notes, Russia, 619.
Nusbaum, B. (consul, Munich):
Hops, Bavaria, 148.
Machinery exhibition, Munich, 157.
United States manufactures. Munich, outlook, 195.
Nuts as food:
France, 537.
Italy, 539.
Korea, 546.
Syria, 547.

O'Hara T. (consul, San Juan del Norte), export bounties, Nicaragua, 591.
Oil trade, American, hindrances, China, 23.
Ontario:
Bicycles, 251.
Harbor and railway improvements, 249.
Mines, 535.
Pulp and paper mill, 534.
Railway, electric street, 250.
Orange Free State, exports, 153.
Oranges, Paraguay, 609.
Osborne, W. M. (consul-general, London):
Cartage, London, 217.
Pepper, decortication, England, 548.
Siphon bottles, England, 40.
Ozmun, E. H. (consul, Stuttgart), sample bureau, Stuttgart, 367.

Palestine, Jews, entry prohibited, 476.
Panama, traffic (1895 and 1896), 316.
Paraguay:
Agriculture, 152.
Coffee growing, 608.
Butter, 420.
Export bounties, 591.
Immigrants, suggestions, 609.
Kerosene, 153.
Oranges, 609.
Mandioca, 152.
Markets, 639.
Matches, 151.
Paris, Berlin, and Brussels, telephone between, 476.
Paris, button industry, 484.
Parker, G. F. (consul, Birmingham), button industry, Birmingham, 491.
Paper and pulp mill, Ontario, 534.
Papyristite, 49.
Passports required for Heidelberg students, 146.
Patents and copyrights, China, 396.
Patents, Russia, 393.
Patterson, R. F. (consul-general, Calcutta):
Cotton piece-goods trade, Calcutta, 32.
Jute crop, India (1898), 473.
Jute industry, Calcutta, effect of plague on, 304.
Trade of Calcutta with United States, 125.
Pearls, New Caledonia, 418.
Pekin-Hankau railway contract, 401.
Pension and savings bureau, Belgium, 437.
Pepper, decortication:
Dutch India, 549.
England, 548.
Netherlands, 549.
Straits Settlements, 550.
Percival, L. H. (vice-commercial agent, St. Christopher), export bounties, Leeward Islands, 589.

Perfumery imports, Japan, 155.
Persia, British vs. Russian trade, 158.
Peru:
  Export bounties, 591.
  Mines and industries, 477.
Petroleum:
  Mexico, 640.
  Regulations, Cape Colony, 154.
  Industry, Russian, 214.
  Russian, Spain, 312.
Philippines:
  Business points, 446.
  Commerce, 1.
  Commercial and industrial conditions, 313.
  Imports, shoe, 10.
  Trade (1897), 559.
Phillips, D. T. (consul, Cardiff), coal strike, South Wales, 345.
Piatti, A. (vice-consul, Nice), export trade, United States, suggestions, 513.
Pipes, American iron, Scotland, 448.
Piracy, vicinity of Maracaibo, 242.
Plants, imports of, prohibited, New Zealand, 623.
Plumacher, E. H. (consul, Maracaibo):
  Bank, mechanics', Venezuela, 626.
  Colonization, Venezuela, 598.
  Immigrants, Italian, Venezuela, 140.
  Piracy, vicinity of Maracaibo, 242.
  Porcelain, concession, Venezuela, 627.
  Taxes, mining, Venezuela, 597.
  Yucca plant, Venezuela, 421.
Pointe a Petre, port, 599.
Pollard, J. K.(consul-general,Monterey):
  Bicycles, Mexico, 286.
  Mexico, southern, natural resources, 422.
  Smelting works, Mexico, 243.
Population, Russia, increase, 70.
Porcelain, concession, Venezuela, 627.
Pork, United States, opposition:
  Germany, 54.
  Italy, 474.
Port charges and regulations, Rio de Janeiro, 571.
Port:
  Hiogo, 125.
  Kyao-chau, free, 468.
  Pointe a Petre, 599.
  Woosung, China, 26.
Ports, open, Japan, harbor regulations, 255.
Ports, opening, Korea, 31.
Postage and immigration, South Africa, 625.
Postal savings bank, Java, 631.
Post-offices, branch, Brussels, 475.
Potato flour, Austria, 68.
Potteries, Staffordshire, 299.
Poultry and eggs, Russia, 474.
Powell, W. F. (minister, Port au Prince), mining enterprise, American, Haiti, 309.
Pratt, E. S. (consul-general, Singapore), pepper, decortication, Straits Settlements, 550.
Prices, high, and increased meat imports, Germany, 528.
Prickitt, W. A. (consul, Rheims), electric roads, Rheims, 620.
Principal countries, trade and industry, 635.
Protectorates and colonies, French, 203.
Pulp and paper mill, Ontario, 534.

Queenstown, docks, 580.
Quinine, Java, 266.

Ragsdale, J. W. (consul, Tientsin):
  Americans, China, 470.
  Shansi concession, 289.
  Tientsin, 550.
Railway and canal contract, Madagascar, 128.
Railway and harbor improvements, Ontario, 249.
Railway and mining concessions, China, 260.
Railways:
  Canadian Pacific, freight rates, 150.
  China, 160.
  Construction, decree as to, China, 303.
  Colombia, 281.
  Contract, Madagascar, 566.
  Electric, Shanghai, 260.
  Electric street, Europe, 300.
  Electric street, Ontario, 250.
  Japan, length, 565.
  New, Mexico, 473.
  Material wanted, Australia, 472.
  Natal, 89.
  Pekin-Hankau, contract, 401.
  Projected, Haiti, construction, 121.
  Rates, cheap, Switzerland, 222.
  Russia, 620.

Railways—Continued.
Russia, freight traffic, 391.
Street, Gothenburg, 571.
Subsidies, British Columbia, 114.
Supplies, China, 25.
Sweden, value, 630.
Railways and mines, China, control, 564.
Raspberries, exporting, Canada, 310.
Reichenberg, button industry, 483.
Rice crop, Japan, 629.
Riddle, J. W. (secretary of legation, Constantinople), export bounties, Turkey, 593.
Rio de Janeiro:
Port charges and regulations, 571.
Steamship communication, 570.
Roads, electric:
Germany, 464.
Rheims, 620.
Rolling stock and locomotives, demand, Japan, 156.
Roofing slates, South Africa, 377.
Rosenheim, G. (acting vice-consul, Santos):
Coffee crop, Brazil, 336.
Rubber, mangabeira, São Paulo, 607.
Roosevelt, G. W. (consul, Brussels):
Anglo-American Chamber of Commerce, Belgium, 61.
Aphthous stomatitis, Belgium, 307.
Cheese association, cooperative, Belgium, 467.
Electric lights, Brussels, 213.
Labor, condition, Belgium, 465.
Laws governing glucose manufacture, Belgium, 294.
Post-offices, branch, Brussels, 475.
Sugar conference, international, Brussels, 307.
Taxes, city, Belgium, 438.
Telephone between Berlin, Brussels, and Paris, 476.
Rubber:
Mangabeira, São Paulo, 607.
Maniçoba, Brazil, 606.
Ruffin, J. N. (consul, Asuncion):
Agriculture, Paraguay, 152.
Butter, Paraguay, 420.
Coffee growing, Paraguay, 608.
Kerosene Paraguay, 153.
Mandioca, Paraguay, 152.
Matches, Paraguay, 151.
Oranges, Paraguay: Immigrants, suggestions to, 609.
Russell, W. W. (secretary of legation, Caracas), export bounties, Venezuela, 593.
Russia:
Beet crop (1897), 148.
Beet cultivation, 466.
Cast-iron industry (1897), 76.
Distilling industry, 389.
Export bounties, 591.
Export, grain, proposition to prohibit, 73.
Flax and hemp crop, 467.
Harvest, failure, 388.
Hops, 147.
In the Chinese markets, 397.
Indian-corn stalks, utilization, 216.
Iron production and sale (1897), 575.
Machinery, agricultural, Russia, reduction of duty, 74.
Merchant marine, 149.
Notes, 619.
Patents, 393.
Petroleum industry, 214.
Population, increase, 70.
Poultry and eggs, 474.
Railways, 620.
Railways, freight traffic, 391.
Tariff changes, 478.
Trade with Germany, 369.
Russian famine, 72.
Russian vs. British trade, Persia, 148.

St. Hill, A. B. (vice-consul, Barbados), export bounties, Barbados, 584.
Salesmen, United States, Europe, 275.
Salvador, tariff rates, new, 426.
Samoa, export bounties, 592.
Sample bureau, Stuttgart, 367.
São Paulo, rubber, mangabeira, 607.
Savings and pension bureau, Belgium, 437.
Savings bank, postal, Java, 631.
Saxony, education, higher, 464.
School, weaving, Gera, 370.
Scotland:
Bicycles, 347.
Bicycles, United States, 448.
Pipes, American iron, 448.
Seal, fur, industry, Japan, 469.
Seeger, E. (consul-general, Rio de Janeiro):
Brazil, resources, 337.
Coffee crop, Brazil, 334.

Seeger, E.—Continued.
Steamship communication, Rio de Janeiro, 570.
United States products, Brazil, 520.
Shanghai, railways, electric, 260.
Shansi concession, 289.
Shantung, German acquisitions, 556.
Shaw, W. I. (consul, Barranquilla), bicycles, Colombia, 151.
Shipbuilding, Nagasaki, 561.
Shipping, Germany, 137.
Shoe imports, Philippines, 10.
Shoes, United States:
England, 194.
Germany, 352.
Guadeloupe, 628.
Shotts, G. W. (commercial agent, Sault Ste. Marie):
Mines, Ontario, 535.
Pulp and paper mill, Ontario, 534.
Siberia:
Economic conditions, 148.
French enterprise, 641.
Vladivostock, commercial institute, 310.
Silk imports, Japan, 311.
Siphon bottles:
England, 40.
France, 39.
Skinner, R. P. (consul, Marseilles):
Hog imports, Marseilles, 619.
Tetanus, treatment by cerebral injection, 475.
Slates, American roofing, Denmark, 460.
Slates, roofing, South Africa, 377.
Smelting works, Mexico, 243.
Smith, T. (consul, Moscow):
Grain export, Russia, proposition to prohibit, 73.
Merchant marine, Russia, 149.
Petroleum, Russian, Spain, 312.
Railways, Russia, 620.
Russia, notes, 619.
Vladivostock, commercial institute, 310.
Smith, A. E. (consul, Vicoria):
British Columbia, industrial and commercial enterprises, 430.
Credit loan act, agricultural, Canada, 150.
Railway subsidies, British Columbia, 114.
Smoked meats, market, Canada, 309.
Soap, duty on, Haiti, 628.
Society Islands, export bounties, 592.
Sodium acetate and calcium acetate, duties, Netherlands, 69.
Sorsby, W. B. (consul, San Juan del Norte):
Debt, foreign, Nicaragua, 308.
Duties, Nicaragua, increase, 477.
South Africa:
Agricultural implements, 381.
Ale and beer, 107.
American vines, 90.
Bicycles, 96, 372.
Cape Colony, commerce, 84.
Cape Colony, government supplies, 373.
Cape Colony, imports and exports, 376.
Cape Colony, leather, 297.
Cape Colony, petroleum regulations, 154.
Cape Colony, tariff changes, proposed, 89.
Cape Colony, telephones, 154.
Cape Colony, vehicles, 311.
Coal, 99.
Cold-storage plants, 93.
Commerce, 78.
Customs union, proposed, 625.
Diamond exports, 317.
Eggs and butter, 102.
Electrical machinery, 372.
Exhibition, freight rates for, 311.
Exporters, United States, advice to, 457.
Flour and cereals, 101.
Freight rates, 378.
Furniture, American, 456.
Gas, 372.
Groceries and provisions, 100.
Harness, 98.
Horses and mules, 93.
Illuminants, 107.
Immigration and postage, 625.
Implements, agricultural, 97.
Imports, 77, 78.
Imports and railways, 89.
Lard, 107.
Law regarding commission agents, 154.
Lumber, 99.
Natal, agriculture, 380.
Natal, commerce, 88.

South Africa—Continued.
Natal, imports, 612.
Openings, 372.
Orange Free State, exports, 153.
Roofing slates, 377.
Shipping American freight to, 379.
Tobacco, 377.
Trade openings, 93.
Trade with Canada, 611.
Watches and clocks, 382.
Windmills, 458.
South America, trade with Germany, 138.
South Wales, coal strike, 345.
Spain:
Finances, 317.
Industrial enterprises, 277.
Petroleum, Russian, 312.
Spanish-American war, German view of results, 287.
Spinning, flax, Cork, 157.
Staves and dried apples, France, 462.
Staves and barrel heads, duty on, France, 307.
Steam turbine, England, 450.
Steamers, French line, subsidies, 209, 312.
Steamship communication, Rio de Janeiro, 570.
Steamship service:
Danish-American, 468.
Japanese, 302.
Vancouver-Vladivostock, 631.
Steel ceilings, stamped, opening for, England, 621.
Steel plates, American, demand, Europe, 156.
Steel tubes, British, United States, 218.
Steer, G. J. (commercial agent, St. Pierre), export bounties, Miquelon, 589.
Stern, L. (commercial agent, Bamberg):
Aniline colors, German, export, 226.
Foreign blending wines, Germany, 199.
Machinery, American and German, 55.
Stettin, cruisers, new, 463.
Storer, B. (minister, Brussels), tax on commercial agents, Kongo Free State, 305.
Stowe, J. G. (consul-general, Cape Town):
American manufactures abroad, 193.
American vines, South Africa, 90.
Stowe, J. G.—Continued.
Agricultural implements, South Africa, 381.
Agriculture, Natal, 380.
Canada, trade with South Africa, 611.
Cape Colony, commerce, 84.
Cape Colony, government supplies, 373.
Customs union, proposed, South Africa, 625.
Exhibition, South Africa, freight rates for, 311.
Export bounties, Belgium, 585.
Exports, Orange Free State, 153.
Freight, American, shipping, to South Africa, 379.
Furniture, American, South Africa, 456.
Immigration and postage, South Africa, 625.
Imports and exports, Cape Colony, 376.
Imports, Natal, 612.
Imports, South Africa, 77.
Law regarding commission agents, South Africa, 154.
Leather, Cape Colony, 297.
Natal, commerce, 88.
Petroleum regulations, Cape Colony, 154.
South Africa, groceries and provisions, 100.
South Africa, trade openings, 93, 372.
Telephones, Cape Colony, 154.
Transvaal, trade conditions, 630.
Vehicles, Cape Colony, 311.
Windmills, South Africa, 458.
Straits Settlements, pepper, decortication, 550.
Straw and flax goods, Belgium, 64.
Straw industry, Germany, 53.
Street railways, electric, Europe, 300.
Strike, coal, South Wales, 345.
Strikes, Germany (1897), 433.
Stuart, G. (minister, Montevideo), export bounties, Paraguay and Uruguay, 591.
Stuttgart, sample bureau, 367.
Subsidies:
French line of steamers, 209, 312.
Railway, British Columbia, 114.

Suez Canal traffic, 298.
Sugar beet:
Cultivation, good seed, 451.
Exports, Germany, 57.
Sugar conference, international, Brussels, 307.
Sugar, Cuban, competition, 421.
Sugar factory, government, Antigua, 627.
Sugar question, Europe, 33.
Swalm, A. W. (consul, Montevideo):
Finances, Uruguay, 626.
Harbor improvements, Montevideo, 239.
Import tax, additional, Uruguay, 471.
Industrial and commercial conditions, Uruguay, 237.
Tariff committee, Uruguay, 308.
Uruguay, trade (1897), 427.
Sweden:
Gothenburg, street railways, 571.
Iron mining and wages, 573.
Railways, value, 630.
Sweden and Norway, export bounties, 592.
Swiney, D. (consul, Cork):
Docks, Queenstown, 580.
Flax spinning, Cork, 157.
Mackerel fishery, Ireland, 147.
Switzerland:
Animals, 474.
Ballooning, 623.
Export bounties, 593.
Exports to United States, 306.
Horses and cattle, 436.
Imports, increased, 630.
Railway rates, cheap, 222.
Tax, commercial traveler, 220.
United States goods, 196.
Syria, nuts as food, 547.

Tariff changes:
Argentine Republic, 471.
Proposed, Cape Colony, 89.
Russia, 478.
Tariff committee, Uruguay, 308.
Tariff increase, Guatemala, 308.
Tariff modifications, Canada, 246.
Tariff, new, and harbor regulations, Japan, 472.
Tariff, new, Nicaragua, 596.
Tariff rates, new, Salvador, 426.
Tariff, United States, effect on trade with Germany, 473.
Tariffs and labor congress, Antwerp, 60.
Tax:
Additional import, Uruguay, 471.
Commercial traveler, Switzerland, 220.
Commercial agents, Kongo Free State, 305.
Taxes:
City, Belgium, 438.
Mining, Venezuela, 597.
Taylor, S. M. (consul, Glasgow):
Bicycles, United States, Scotland, 448.
Pipes, American iron, Scotland, 448.
Tea trade, Formosa, 415.
Telegraph lines, British Columbia, 430.
Telegraphy without wires, Belgium, 307.
Telephone between Berlin, Brussels, and Paris, 476.
Telephones, Cape Colony, 154.
Terres, J. B. (vice-consul-general, Port au Prince), duty on soap, Haiti, 628.
Tetanus, treatment by cerebral injection, 475.
Thackara, A. M. (consul, Havre):
Calcium carbide and acetylene, 279.
Subsidies, French line of steamers, 209.
Subsidies, French line of steamers (correction), 312.
Thompson, E. H. (consul, Progreso), railroad, new, Mexico, 473.
Tientsin, 550.
Tillman, J. D. (minister, Quito), export bounties, Ecuador, 586.
Tobacco:
China, 629.
South Africa, 377.
Transvaal, trade conditions, 630.
Traveling agents and foreign languages, 361.
Treaties and commercial code, Japan, 472.
Trichinæ, Germany, 200.
Trust, cement, proposed, Japan, 624.
Tubes, British steel, United States, 218.
Tucker, J. G. (consul, Martinique), export bounties, French West Indies, 586.
Tunis, bicycle trade, 305.
Turbine, steam, England, 450.

Turkey:
Erzerum, business houses, 383.
Export bounties, 593.
Wheat, export, prohibited, 308.
Turner, C. E. (consul-general, Ottawa):
Customs regulations for sporting outfits, Canada, 248.
Tariff modifications, Canada, 246.

Unions, Germany's export, 362.
United Kingdom:
British trade, competition, 491.
British vs. American shipping rates, 508.
Docks, Queenstown, 580.
England, American furniture, 621.
England, American manufactures, 638.
England, bicycle, United States, competition, 285.
Bicycles, United States, Scotland, 448.
England, Birmingham, button industry, 491.
England, ceilings, stamped steel, opening for, 621.
England, "country-damaged" cotton, 516.
England, furniture, United States 271.
England, shoes, United States, 194.
England, steam turbine, 450.
England, potteries, Staffordshire, 299.
Exports, American, hindrances, 508.
London, cartage, 217.
Scotland, bicycles, 347.
Scotland, pipes, American iron, 448.
South Wales, coal strike, 345.
United States:
Apples and fruit market, Germany, 529.
Apples, Germany, 353.
Bicycle competition, England, 285.
Bicycles, Scotland, 448.
Butter, Japan, 419.
Canned goods, Denmark, 461.
Civil engineer, Korea, 303.
Coal, foreign countries, 343.
Commission houses, Germany, 355.
Consuls, activity, 617.
Dried apples, France, 143.
Export methods, complaints, Germany, 622.
United States—Continued.
Export trade, suggestions, 513.
Exporters to South Africa, advice to, 457.
Exports to Great Britain, hindrances, 508.
Exports to Canada, 117.
Freight, shipping, to South Africa, 379.
Fruit, objections, Germany, 354.
Furniture, England, 271, 621.
Furniture, South Africa, 456.
Goods, Switzerland, 196.
Hog products, Germany, inspection, 200.
Imports from Germany, 225, 364.
Imports from Switzerland, 306.
Iron pipes, Scotland, 448.
Machinery, Denmark, 352.
Machinery, Germany, 55.
Manufactures abroad, 193.
Manufactures, England, 638.
Manufactures, Munich, outlook, 195.
Manufactures, new fields, 191.
Mining enterprise, Haiti, 309.
Oil trade, hindrances, China, 23.
Pork, opposition, Germany, 54.
Pork, opposition, Italy, 474.
Products, Brazil, 520.
Products, Japan, 633.
Roofing slates, Denmark, 460.
Salesmen, Europe, 275.
Shoes, England, 194.
Shoes, Germany, 352.
Shoes, Guadeloupe, 628.
Steel plates, demand, Europe, 156.
Steel tubes, British, 218.
Tariff, effect on trade with Germany, 473.
Trade, Calcutta, 125.
Trade, Greece, 356.
Trade methods, England, faults, 359.
Trade, North China (correction), 441.
Trade opportunities, Germany, 524.
Vines, South Africa, 90.
Wire nails, Europe, 460.
United States of Central America, constitution, 601.
United States vs. British shipping rates, 508.
United States vs. English iron industry, 579.

Uruguay:
Agricultural implements, 236.
Export bounties, 591.
Finances, 626.
Gold production, 238.
Harbor improvements; Montevideo, 239.
Import tax, additional, 471.
Industrial and commercial conditions, 237.
Meat-extract business, 237.
Tariff committee, 308.
Trade (1897), 427.

Vancouver Island, mining, 432.
Vancouver-Vladivostock steamship service, 631.
Vehicles, Cape Colony, 311.
Venezuela:
Bank, mechanics', 626.
Caracas warehouse, 176.
Coal, 240.
Colonization, 598.
Export bounties, 593.
Immigrants, Italian, 140.
Maracaibo, piracy in vicinity, 242.
Mining taxes, 597.
Porcelain concession, 627.
Yucca plant, 421.
Vessels, war, German build, 463.
Vienna, button industry, 481.
Vinegar manufacturers, Ontario, amalgamation, 631.
Vines, American, South Africa, 90.
Vladivostock, commercial institute, 310.

Wages and iron mining, Sweden, 573.
Wages, Breslau, 224.
Wales, South, coal strike, 345.
War, Spanish-American, German view of results, 287.
War vessels, German build, 463.
Warehouse, Caracas, 176.
Warner, B. H., jr., (consul, Leipzig):
Commercial education, Gera, 370.
Exports, German, to United States, 364.
Pork, United States, opposition, Germany, 54.
Shoes, United States, Germany, 332.
Traveling agents and foreign languages, 361.
Weaving school, Gera, 370.
Washington, H. L. (consul, Alexandretta), nuts as food, Syria, 547.
Watch trade, Japan, 263.
Watches and clocks:
Arabia, 382.
South Africa, 382.
Water courses, mountain, as industrial aids, 618.
Watts, E. (vice and deputy consul-general, Cairo), Suez Canal traffic, 298.
Weaving machine, new, France, 581.
Weaving school, Gera, 370.
Wheat and flour, Japan, 156.
Wheat crop, good, France, 629.
Wheat export prohibited, Turkey, 308.
Wheat flour Japan, 562.
Wheat market, Argentine, 241.
Wheat, world's supply for bread, 385.
White, H. (secretary of embassy, London), British trade, competition, 491.
White, A. D. (ambassador, Berlin):
Export bounties, Germany, 588.
German consular service, Brazil, increase, 120.
Kyao-chau, a free port, 468.
Wilson, H. L. (minister Santiago):
Export bounties, Chile, 585.
Financial condition, Chile, 321.
Windmills, South Africa, 458.
Wine production, world's, 301.
Wines:
California, Belgium, 198.
Foreign blending, Germany, 199.
Winslow, E. D. (consul-general, Stockholm):
Iron mining and wages, Sweden, 573.
Railways, Sweden, value, 630.
Wire nails, American, Europe, 460.
Wolff, P. E. (commercial agent, Nouméa):
New Hebrides, industries, 270.
Pearls, New Caledonia, 418.
Women in trade, Germany, 475.
Woosung, port, China, 26.
Workingmen's houses, Germany, 465.
Workingmen's insurance system, Germany, value, 51.
World's export trade, 145.
World's wine production, 301.

Yangtze, new trade regulations, 28.
Yucca plant, Venezuela, 421.

Zanzibar, commercial conditions, 292.

Vol. LVIII. No. 219.

CONSULAR REPORTS.

DECEMBER, 1898.

COMMERCE, MANUFACTURES, ETC.

[FOR TABLE OF CONTENTS, SEE FIRST PAGE.]

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1898.